# **# ANCHOR** by **Panasonic** IAQ **PRODUCT**CATALOGUE 2 0 2 1

# **Panasonic**

#### PANASONIC LIFE SOLUTIONS INDIA PVT. LTD.

3rd Floor, B Wing I-Think Techno Campus, Pokharan Road No. 2, Thane (W), Thane - 400 607, Maharashtra, India. Customer Care: 022-4130 4130 Email: wecare@in.panasonic.com

# **Panasonic**

Since 1918, Panasonic has been a pioneer in technology and has given the world products to create a better life. With nearly a century in smarter electrical solutions for homes and industries. Panasonic has also emerged as a global leader in Lighting Energy and Indoor Air Quality.



- Manufacturing Facility as per Panasonic Standards
- Advance Machinery
- Japanese Technology. etc



CONSUMER LIGHTING



PROFESSIONAL LIGHTING



INDOOR AIR QUALITY



HOME AUTOMATION



SOLAR ENERGY SOLUTIONS



Anchor has been the industry front-runner in wiring devices manufacturing since 1963 and today it has expanded its product portfolio to emerge as one of the largest domestic manufacturers of electrical construction materials. Its contemporary products are supported by an immense trust in the brand.



WIRING DEVICES



SWITCHGEAR

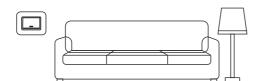


WIRES, CABLES & TAPES



CONDUIT PIPES AND FITTINGS





# Comfort and safety at your fingertips

Our range of switches deliver unmatched comfort, exquisite designs, luxury and superior technology. Being a major player in the electrical switches and switch accessories segment for over five decades, Anchor strives towards fostering growth through ingenious solutions and absolute value.



●● 2 3 ●●







# SMART DIGITAL MODERN LIVING

A new way of life is just a touch away...







Feather Touch Panel



Remote IR Control



Wi-Fi Contol



Easy Installation



Slim/Sleek Design



Retrofit Panel



Curtain Contol



Phase Dimming Control



Make your Mood Setting







Code	Description	Light On/Off	Fan	Phase	Curtain	IR Remote	WiFi
22987	3plus1 Basic	3	1	-	-	Small	-
22988	3plus1 WiFi	3	1	-	-	Small	Yes

**Dimensions:** Product size: 154mm x 91 mm x 53 mm, fitted in 4 Module Anchor Metal Box.



Code	Description	Light On/Off	Fan	Phase	Curtain	IR Remote	WiFi
22989	5plus1 Basic	5	1	-	-	Small	-
22992	5plus1 Basic + WiFi	5	1	-	-	Small	Yes
22990	5plus1 Dimm	3	1	2	-	Big	-
22991	5plus1 Dimm WiFi	3	1	2	-	Big	-

**Dimensions:** Product size: 226mm x 91 mm x 53 mm, fitted in 6 Module Anchor Metal Box.



Code	Description	Light On/Off	Fan	Phase	Curtain	IR Remote	WiFi
22995	6plus2 Basic	6	2	-	-	Big	-
22998	6plus-6 lights, 2 Fan + Wifi	6	2	-	-	Big	Yes
22999	6plus-4 lights, 2 Fan, Curtain	4	2	-	1	Big	-
22993	6plus2 Dimm Curtian	2	2	2	1	Big	-
22993	6plus2 Dimm Curtian WiFi	2	2	2	1	Big	Yes

**Dimensions:** Product size: 262mm x 91 mm x 55 mm, fitted in 8 Module Anchor Metal Box.



●● 6 7 **●●** 





Switch tested for 100000 On/Off switching operations



Captive Screw Terminals: Never to loose screws & Quick to install



Switches with Soft Operations with sound (< 65 db)



Protective Plastic Cover for Plates



Smooth Insertion & Withdrawal Force



Entire range adheres to BIS requirements



IP20 - No access of live parts by finger and hence Safe



All Sockets With Safety Shutter



Sturdy Inner Frame



Today space are evolving - reflecting your style. Which is why, ROMA Switches ushers in another revolution with the most elegant and glamorous switches ever. The efficiency has always been known for the style.

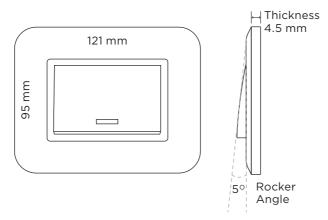
ROMA switches is India's Largest Selling Modular Switches! These comes in a variety of range in terms of colors, textures and finishes for its plates and it blends virtually with any home decor.





# **SLIM, SLEEK & CURVY DESIGN**

- Better Aesthetic
- Blends with the wall and gives a very sleek look



#### **SUPER GLOSSY FINISH**

Gloss is the optical property of a surface, characterized by its ability to reflect light specularly.

Glossiness readings = > G140 Super Glossy Range = G140 - G150



# SOFT OPERATIONAL SOUND

#### Switches with reduced sound

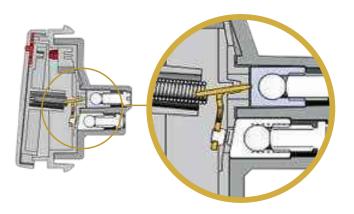
• Sound Level <65 Db



# **PATENTED TECHNOLOGY**

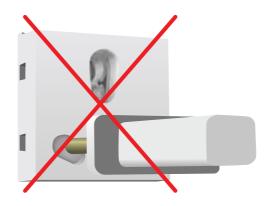
# Toggled Technolgy

- Increased life and smooth operation
- Less Sound
- Less Bounce
- Contact Gap = Mini Gap



# **Dual Shutter Structure**

- Shutter structure split in 2 parts therefore even 2 pin can be inserted easily
- · Safety Shutter
- Mostly demanded by govt. and consultants



Regular Socket

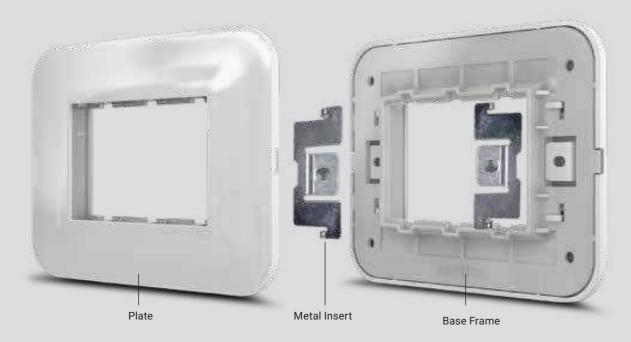


Roma Dual Shutter Socket

**1**0 11 • •



# Plate Structure



#### Plate fitment with metal inserts

• Improve overall strength of the inner frame • Sturdy plates • Reduces possibility of plate damages



# FRONT REMOVAL ACCESSORIES





Easy installation from the front

Easy removal from the front

- Easy to install and uninstall the accessories
- No need to remove the inner frame from metal box and hence it is safe & saves time

# FIRE / FLAME RETARDANT MATERIAL



- Flame retardant (Resist fire)
- Diffcult to mould therefore duplicacy of product is very difficult
- Urea formaldehyde has high fire resistance compared to PC or other thermoplastic

13 ••



# Switches, 10AX

66101 10AX, 1Way Switch, 1M

66111 10AX, 1Way Switch with Indicator, 1M

66102 10AX, 2Way Switch, 1M66103 10A, Bell Push Switch, 1M

66133 10A, Bell Push Switch with Indicator, 1M

66201 10AX, 1Way Switch, 2M

66211 10AX, 1Way Switch with Indicator, 2M

66202 10AX, 2Way Switch, 2M



# **Bell Push**

66203 10A, Bell Push Switch, 2M

66233 10A, Bell Push Switch with Indicator, 2M

66333 10A, Bell Push Switch with Indicator, 3M









# Switches, 20A

66104 20A, 1Way Switch, 1M 66144 20A, 1Way Switch with Indicator, 1M 66105 20A, 2Way Switch, 1M 66204 20A, 1Way Switch, 2M 66244 20A, 1Way Switch with Indicator, 2M 66205 20A, 2Way Switch, 2M 66301 20A, 1Way Switch, 3M 66311 20A, 1Way Switch with Indicator, 3M 66302 20A, 2Way Switch, 3M



# Power Switches - Heavy Duty (240V~50Hz)

66325 25A, S.P, 1Way Switch with Indicator, 1M 66332 32A, D.P, 1Way Switch with Indicator, 2M







# **Motor Starter Switches**

66020 20A, Motor Starter Switch, 2M 66025 25A, Motor Starter Switch, 2M





# Sockets With Safety Shutter

66401	10A, 2Pin Uro Socket, 1M	Solida		An Coffee of the	
66408	6A, 2 Pin Round Socket (with Shutter), 1M, ISI	<b>A</b>			
66402	10A, 3Pin Socket, 2M, ISI	W	0 0	el 10	
66403	10A, Multi Socket, 2M		Name of the last		
66404	16A, 3Pin Socket, 2M, ISI	66401	66402	66403	66404 / 66414
66414	25A, 3Pin Socket 2M	00 101	00102	00 100	00 10 17 00 11 1
66405	20A/10A, Twin Socket, 2M		Shaltherith a	40.00	
66455	6A/16A, Twin Socket, ISI, 2M		- 31		
66406	6A/16A, Twin Socket, 3M, ISI	.007		107	•
66407	13A/10A/6A, Combi Socket for all Pins, 2M	00	0	0	
		66405 / 66455	6	6406	66407

<sup>\*16</sup>A, 20A, 25A Switch not suggested for geyser load. Instead MCB/Motor Stater must be used.

# Fan Regulators & Dimmers

66501 66502 66503 66504	100W, Step Fan Regulator, 1M 100W, Step Fan Regulator, 2M 100W, Step Fan Regulator, 2M (ISI) 100W, Step Fan Regulator (For High Speed Fans)				0	0
66505	450W, Dimmer, 1M (Incandescent Lamp)	66501	66502	66503 / 66504	66505	66506 / 66507
66506	650W, Dimmer, 2M (Incandescent Lamp)	3000.	22302	111117 00001	22000	22227 00007
66507	150W, Dimmer for LED, 2M					

# Support Modules (240V~50Hz)

1	66551	RJ11, Tel Jack, Single with Shutter, 1M		40000				THE RESERVE	57
ı	66552	RJ11, Tel Jack, Double w/o Shutter, 1M	(54)	100		-			
ı	66555	RJ45, Receptor With Shutter, 1M	1	-		8	(10)		
-	66556	RJ45, Computer Socket, Cat 5e, 1M	1000			-	1	2,2	
1	66557	RJ45, Computer Socket, Cat 6, 1M		Company of the Compan			MAKES AND		
1	66601	Cord Outlet with Grip, 1M	66551	66552 6	6555 / 66556	66601	66602	66603	_
1	66602	TV Socket Outlet, 1M	20001	00002	66557	00001	00002	00000	
1	66603	Buzzer,Dura, 2M							
1	66604	Blank Plate, 1M			\$15\$5\$\$\$\$E	Total Control	111000	A CONTRACTOR OF	
1	66644	Blank Plate, 2M							
ı	66606	6A, Overload Protection - Manual Reset - Table Fuse, 1M							
ı	66616	16A, Overload Protection - Manual Resettable Fuse, 1M			40000	100			SAT.
1	66605R	Indicator - LED (Red), 1M	66604	66644	66606 / 66616	66605R	66605N	66605G	66708
1	66605N	Indicator - LED (Natural), 1M							
1	66605G	Indicator - LED (Green), 1M	# The state of the						
1	66608	Satellite Socket	44.50		HARRISON.				
1	66709	USB Charger, Single Port (1A, 5V DC), 1M			-		Y S		
ı	66710	USB Charger, Dual Port (2A, 5V DC), 2M (CRS Certified)				ı	L <sub>R</sub>		
ı	66715	USB Charger, Single Port (2.1A, 5V DC), 1M (CRS Certified)	66709	66710	66715	66711	66712		
	66711	High-Definition Multimedia Interface, 1M	00/03	00710	00713	00/11	00/12		
	66712	Audio Video Socket, 1M							

# **Hospitality Range**

66701 66702	20A, Electronic Keycard Unit with 30 Sec Time Delay, 3M DND MMR Internal unit (DND Switch, MMR Switch), 2M	*	DOM STORY STORY	
66703	DND MMR External unit (DND Indicator, MMR Indicator & Bell Push Switch), 2M			
66704	20VA, Shaver Socket with Transformer (With 4M Curve Plate ), White	66701	66702 (Indoor Unit)	66703 (Outdoor Unit)
66714	20VA, Shaver Socket with Transformer (With 4M Square Plate), White			
66705	Bell Call Indicator, 1M	7% ~ • •	77. " * * *	_
66706	Foot Light,Led Based (Cool Day Light),3M	- E		
66766	Foot Light,Led Based (Warm White Light),3M	The second	100000	A STATE OF THE PARTY OF THE PAR
66707	Foot Light with PIR (Cool Day Light), 2M	00707	0071/	00705
66777	Foot Light with PIR (Warm White), 2M	66704	66714	66705
66607	Emergency LED Light Unit	SIMPLEMENT OF THE SECTION OF THE SEC		The state of the s
66708	PIR Sensor, 2M			(120000)
66609	Bluetooth Speaker, 2M	13 ST		• 6
		66706 / 66766	66707 / 66777	66708 66609



#### Pure



White Curve Design

Colour Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module	8 Module Horizontal	9 Module Vertical	12 Module	16 Module	18 Module
White Curve	66801WH	66802WH	66803WH	66804WH	66806WH	66808WH	66888WH	66809WH	66812WH	66816WH	66818WH

# **Bold**



Black Curve Design

Colour Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module	8 Module Horizontal	9 Module Vertical	12 Module	16 Module	18 Module
Black Curve	66801BL	66802BL	66803BL	66804BL	66806BL	66808BL	66888BL	66809BL	66812BL	66816BL	66818BL

# Classy



Silver Curve Design

Colour Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module	8 Module Horizontal	9 Module Vertical	12 Module	16 Module	18 Module
Silver Curve	v66801SL	66802SL	66803SL	66804SL	66806SL	66808SL	66888SL	66809SL	66812SL	66816SL	66818SL

# Hue



#### **Cover Plate with Base Frame**

Colour Palate With Frame	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module	8 Module Horizontal	9 Module Vertical	12 Module	16 Module	18 Module
Sea Blue	66801SBG	66802SBG	66803SBG	66804SBG	66806SBG	66808SBG	66888SBG	66809SBG	66812SBG	66816SBG	66818SBG
Oriental Maroon	668010MS	668020MS	668030MS	668040MS	668060MS	668080MS	668880MS	668090MS	668120MS	668160MS	668180MS
Copper White	66801WHC	66802WHC	66803WHC	66804WHC	66806WHC	66808WHC	66888WHC	66809WHC	66812WHC	66816WHC	66818WHC
Lamp Black	66801LBC	66802LBC	66803LBC	66804LBC	66806LBC	66808LBC	66888LBC	66809LBC	66812LBC	66816LBC	66818LBC
Woody	66801WDB	66802WDB	66803WDB	66804WDB	66806WDB	66808WDB	66888WDB	66809WDB	66812WDB	66816WDB	66818WDB

# Only Cover Plate Frame

Colour Palate With Frame	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module	8 Module Horizontal	9 Module Vertical	12 Module	16 Module	18 Module
Sea Blue	66801SBG-C	66802SBG-C	66803SBG-C	66804SBG-C	66806SBG-C	66808SBG-C	66888SBG-C	66809SBG-C	66812SBG-C	66816SBG -C	66818SBG-C
Oriental Maroon	668010MS-C	668020MS-C	668030MS-C	668040MS-C	668060MS-C	668080MS-C	668880MS-C	668090MS-C	668120MS-C	668160MS-C	668180MS-C
Copper White	66801WHC-C	66802WHC-C	66803WHC-C	66804WHC-C	66806WHC-C	66808WHC-C	66888WHC-C	66809WHC-C	66812WHC-C	66816WHC-C	66818WHC-C
Lamp Black	66801LBC-C	66802LBC-C	66803LBC-C	66804LBC-C	66806LBC-C	66808LBC-C	66888LBC-C	66809LBC-C	66812LBC-C	66816LBC-C	66818LBC-C
Woody	66801WDB-C	66802WDB-C	66803WDB-C	66804WDB-C	66806WDB-C	66808WDB-C	66888WDB-C	66809WDB-C	66812WDB-C	66816WDB-C	66818WDB-C

# Clear



# Cover Plate with Base Frame

Glass Plate	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Pure White	66901GPW	66902GPW	66903GPW	66904GPW	66906GPW	66908GPW	66988GPW	66912GPW	66916GPW	66918GPW
Space Black	66901GSB	66902GSB	66903GSB	66904GSB	66906GSB	66908GSB	66988GSB	66912GSB	66916GSB	66918GSB
Aqua Blue	66901GAB	66902GAB	66903GAB	66904GAB	66906GAB	66908GAB	66988GAB	66912GAB	66916GAB	66918GAB

# Only Cover Plate Frame

Glass Plate	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Pure White	66901GPW-C	66902GPW-C	66903GPW-C	66904GPW-C	66906GPW-C	66908GPW-C	66988GPW-C	66912GPW-C	66916GPW-C	66918GPW-C
Space Black	66901GSB-C	66902GSB-C	66903GSB-C	66904GSB-C	66906GSB-C	66908GSB-C	66988GSB-C	66912GSB-C	66916GSB-C	66918GSB-C
Aqua Blue	66901GAB-C	66902GAB-C	66903GAB-C	66904GAB-C	66906GAB-C	66908GAB-C	66988GAB-C	66912GAB-C	66916GAB-C	66918GAB-C

●● 18 19 ●●



#### Sheen





Gold

Brushed Aluminium

#### **Cover Plate with Base Frame**

Glass Plate	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Gold	66901GD	66902GD	66903GD	66904GD	66906GD	66908GD	66988GD	66912GD	66916GD	66918GD
Brushed Alu.	66901BA	66902BA	66903BA	66904BA	66906BA	66908BA	66988BA	66912BA	66916BA	66918BA

#### Only Cover Plate Frame

Glass Plate	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Gold	66901GD-C	66902GD-C	66903GD-C	66904GD-C	66906GD-C	66908GD-C	66988GD-C	66912GD-C	66916GD-C	66918GD-C
Brushed Alu.	66901BA-C	66902BA-C	66903BA-C	66904BA-C	66906BA-C	66908BA-C	66988BA-C	66912BA-C	66916BA-C	66918BA-C

# **Base Frame For Colour Plate**





Colour Plate

Glass & Metal Plate

Plate	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Square	9 Module Horizontal	12 Module	16 Module	18 Module
Colour	66801C-I	66802C-I	66803C-I	66804C-I	66806C-I	66808C-I	66888C-I	66809C-I	66812C-I	66816C-I	66818C-I
Glass & Metal	66901MG-I	66902MG-I	66903MG-I	66904MG-I	66906MG-I	66908MG-I	66988MG-I	-	66912MG-I	66916MG-I	66918MG-I

# Weatherproof Box, IP55

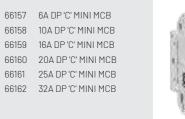
66662 2M, Weatherproof Box (IP55), Grey Colour 66663 3M, Weatherproof Box (IP55), Grey Colour 66664 4M, Weatherproof Box (IP55), Grey Colour



# Roma Mini Modular SP MCB 'C' Type (White)

	A 100 mm	6A SP 'C' MINI MCB	3151
3kA	The second second	10A SP 'C' MINI MCB	6152
JAA		16A SP 'C' MINI MCB	6153
IS / IEC 60898-1	13	20A SP 'C' MINI MCB	6154
CM / L-8653085	- Fil	25A SP 'C' MINI MCB	6155
100	4	32A SP 'C' MINI MCB	3156
9001:2000	CSZ		
	31.5		
CB SP	Mini Modular MC		

# Roma Mini Modular DP MCB 'C' Type (White)





Also available in Black & Silv

#### Floor Junction Box



# **Plates Dimensions**

Module	1 M	2 M	3 M	4 M	6 M	8 M Horizontal	8 M Vertical	9 M	10 M	12 M	12 M Horizontal	16 M	18 M
ROMA URBAN													
X(mm)	98	98	121	156	226	248	156	259	NA	226	NA	248	226
Y(mm)	95	95	95	95	95	95	158	95	NA	158	NA	158	221

●● 20 21 ●●







Premium switches & accessories



Switches, Sockets & Regulators with ISI marking



Elegant and gloss finish with accessories in glossy white



Switch tested for 100000 On/Off switching operations



Captive Screw Terminals: Never to loose screws & Quick to install



Switches with Soft Operations with sound (65~67 db)



IP20 - No access of live parts by finger and hence Safe



Front removal from the frame is enabled



Entire range adheres to BIS requirements



Roma Plus is the newest modular range of wiring devices and accessories from Anchor by Panasonic. It's the new brainwave that befits the requirements and commercial spaces alike.

The glam and glitter, grace and glory enthral your senses with stellar designs, glossy finished wiring accessories and low-sound operation, pleasing to the ears as a smoothly orchestrated symphony. Curved plate, collarless design and glossy finish transform your living space to a live concerto, vibrant and enticing as a timeless piece of art.





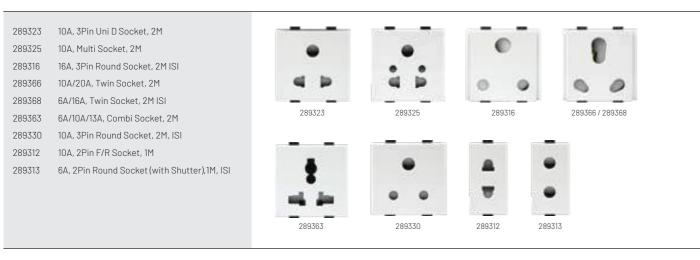
#### Switches 240V~50Hz

289101 10AX, 1Way Switch, 1M 289102 10AX, 2Way Switch, 1M 289103 10AX, 1Way Switch with LED Indicator, 1M 289104 10A, Bell Push Switch, 1M 289105 10A, Bell Push Switch with LED Indicator, 1M 289161 20A, 1Way Switch, 1M 289162 289162 20A, 2Way Switch, 1M 289163 20A, 1Way Switch with LED Indicator, 1M

#### Dura Switches 240V~50Hz



#### Sockets 240V~50Hz



# Fan Regulator (240V-50Hz)

#### Light Dimmer 240V-50Hz

289545	450W, Dimmer, 1M	200	- A	A
289565	650W, Dimmer, 2M	340	-	-
289566	150W LED Dimmer, 2M		0 -	0 -
		-		
			54 THE	
		289545	289565	289566

Ideal for controlling Fan Motors (inductive Loads)

# Support Moduler (240V~50Hz)

289677	TV Socket Outlet, 1M		Sentiment.		1625 (51)	end Charle	
289666	Cord Outlet with Grip, 1M			v 💿		•	
289107	Audio Video Socket, 1M	(6)	0	r.6		- 11	
289110	3.5mm Audio Jack (female to female connector)			1.0		USB 1000mA	1 21
288219	USB Charger - 1000mA 5V DC, 1M	289677	289666	289107	289110	288219	28
289109	USB Charger - 2100mA 5V DC, 1M (CRS Certified)			_			
289108	USB Charger - 2500mA 5V DC, 2M (CRS Certified)		i.		100		
289681	Fuse Unit 16 or 10A, 1M		611		_	11	
289684	Blank Plate, 1M	====	_:	91			
289688	Night Lamp with LED (Red), 2M	- James	parties to	- 60	4.0		
		289108	2	89681 2	89684	289688	

\*16A, 20A, 25A Switch not suggested for geyser load. Instead MCB/Motor Starter must be used

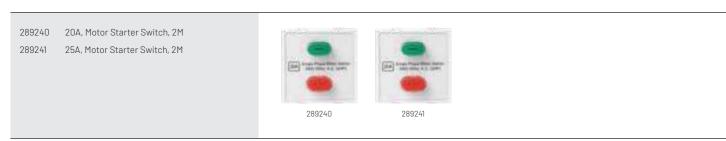
**2**4 25



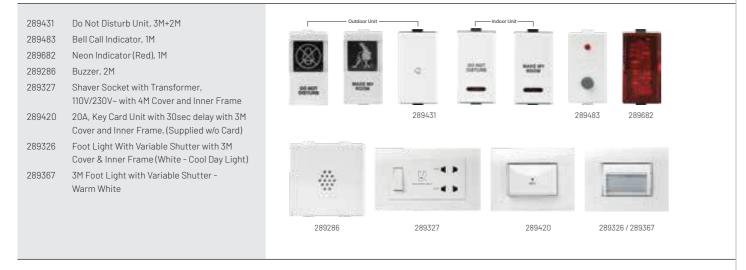
#### Data Socket



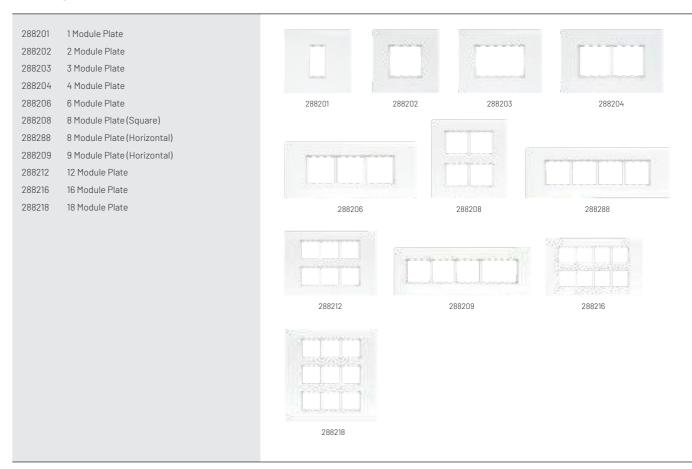
#### Motor Starter Switch 240V~50Hz



#### Hospitality Range (240V~50Hz)



#### **PLATES**



#### **Plates Dimensions**

Module	1 M	2 M	3 M	4 M	6 M	8 M Horizontal	8 M Vertical	9 M	10 M	12 M	12 M Horizontal	16 M	18 M
ROMA PLUS													
X(mm)	94	94	118	146	220	260	146	260	NA	220	NA	260	220
Y(mm)	90	90	90	90	90	90	154	90	NA	154	NA	154	220

#### **UNO Mini Modular MCB SP**

#### **UNO Mini Modular MCB DP**

19980	6A SP 'C' Mini MCB	V consider
19981	10A SP 'C' Mini MCB	ANCHOR GRO
19982	16A SP 'C' Mini MCB	1 0
19983	20A SP 'C' Mini MCB	
39984	25A SP 'C' Mini MCB	
19985	32A SP 'C' Mini MCB	1 (11
		Alexander of



89986 6A DP 'C' Mini MCB 89987 10A DP 'C' Mini MCB 89988 16A DP 'C' Mini MCB 89989 20A DP 'C' Mini MCB 89990 25A DP 'C' Mini MCB 89991 32A DP 'C' Mini MCB



**2**6 27







Glossy finish



IP20 - No access of live parts by finger and hence Safe



Captive Screw Terminals: Never to loose screws & Quick to install



Switch tested for 100000 On/Off switching operations



Switches, Sockets & Regulators with ISI marking



Antibacterial range available on request



Aesthetically designed, robust functionality, widest choice in coloured cover plates, accessories, and collars make it a designer's paradise. Roma range of switches & accessories have evolved matching the modern day expectations of all segments in the electrical building construction business.

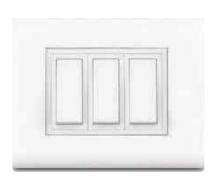
Offering unparalleled visual experience, comforable operation and easy availability in every nook and corner of India, it has been on the forefront of innovation, manufactured with state-of-the-art Japanese technology.







# **Basic Plate**









Enhanced Safety

Robust Functionality

Long Operational Life

# Colour Range



















COLOUR COMBINATIONS

# Glass Plate





Precision Diamond Cut for Stylish Design



High Density Toughened Glass



UPP Technology ensures Rich Colour Effect



# Switches

21011 10AX1 Way Switch
21022 10AX 2 Way Switch
21033 10AX 1 Way Switch With Neon
30840 10AX 1 Way Switch With Fan Mark
21044 10A Bell Push
21055 10A Bell Push With Neon 21011 21022 21033 30840 21044 21055

#### **Dura Switches**

21510 10AX 1 Way Switch
34964 10AX 1 Way Switch With Neon
21521 10AX 2 Way Switch
21554 10A Bell Push
30715 10A Bell Push With Neon
21510 34964 21521 21554 30715

#### **Switches**

21066 20A 1 Way Switch
21088 20A 2 Way Switch
21077 20A 1 Way Switch With Neon
21066 21088 21077 21532 21769 21543

#### **Dura Switches**

21532 20A 1 Way Switch
21769 20A 1 Way Switch With Neon
21543 20A 2 Way Switch
21066 21088 21077 21532 21769 21543

#### **Power & Motor Starter Switches**

22014 25A S.P. 1 Way Switch With Neon, ISI
21984 32A D.P. 1 Way Switch With Neon, ISI
20427 20A Starter Switch
20405 25A Starter Switch
22014 21984 20427 20405

# Socket with Safety Shutter

20530 6A 2 Pin Socket Round 21748 6A, 2Pin Round Socket with Shutter, ISI 21667 6A URO 2 Pin Scoket 0 w 4 10A 3 Pin Socket With, ISI 21113 10A Uni D Scoket 20530 21667 21102 21113 30373 10A Multi Socket For Cell Phone Pin or 2pin & 3pin

# **Power Socket with Safety Shutter**

21124 16A 3 Pin Socket, 240V ISI
30828 6A/16A Twin Socket ISI
34374 25 & 10A Twin Socket (Heavy Duty)
22070 13/10/6 A Combi Socket For All Pins
21747 13A Flat Pin English Socket
21124 30828/34374 22070 21747

#### **Fan Regulators**

Fan Step Regulator Tiny EME 100W
Fan Step Regulator Dura EME 100W
High Speed Fan Regulator Dura EME 100W
100W Fan Regulator, 2M, ISI

22546
21496
22036 / 20507

#### Dimmer

Fan Step Regulator Tiny EME 100W
Fan Step Regulator Dura EME 100W

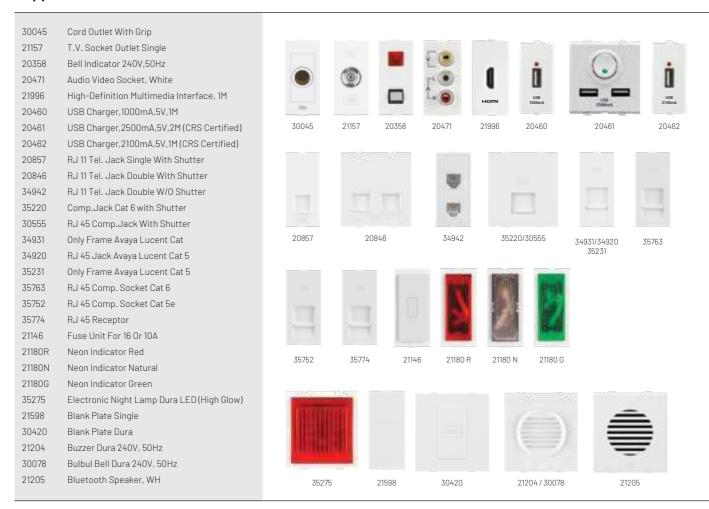
1036 High Speed Fan Regulator Dura EME 100W

100W Fan Regulator, 2M, ISI

20799 21190 / 30136 30340 / 30351 30046



#### **Support Modules**



#### **Hotel & Hospital Range**



#### **Hotel & Hospital Range**





#### **Roma Vetro Glass Plates**



Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module
Pure White	30216GPW	30227GPW	30238GPW	30249GPW	30250GPW	30384GPW	30260GPW	30271GPW	30282GPW
Space Black	30216GSB	30227GSB	30238GSB	30249GSB	30250GSB	30384GSB	30260GSB	30271GSB	30282GSB
Aqua Blue	30216GAB	30227GAB	30238GAB	30249GAB	30250GAB	30384GAB	30260GAB	30271GAB	30282GAB
Coconut Brown	30216GCB	30227GCB	30238GCB	30249GCB	30250GCB	30384GCB	30260GCB	30271GCB	30282GCB
Regal	30216GRM	30227GRM	30238GRM	30249GRM	30250GRM	30384GRM	30260GRM	30271GRM	30282GRM

# Tressa Solid Plates



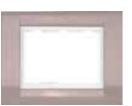


Glass Plate	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
White	30216WH	30227WH	30238WH	30249WH	30250WH	30384WH	30260WH	30271WH	34680WH	30282WH
Matt Black	30216MB	30227MB	30238MB	30249MB	30250MB	30384MB	30260MB	30271MB	34680MB	30282MB
Silver	30216SL	30227SL	30238SL	30249SL	30250SL	30384SL	30260SL	30271SL	34680SL	30282MB

\* Do not use "Hard Cleaning Agent" for cleaning purpose.



# Tressa Glossy Plates







Glossy Cream

Glossy Black

Azul Grey

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Cream - CR	30216CR	30227CR	30238CR	30249CR	30250CR	30384CR	30260CR	30271CR	34680CR	30282CR
Black - BL	30216BL	30227BL	30238BL	30249BL	30250BL	30384BL	30260BL	30271BL	34680BL	30282BL
Azul Grey - AG	30216AG	30227AG	30238AG	30249AG	30250AG	30384AG	30260AG	30271AG	34680AG	30282AG

#### **Tresa Texture Plates**





Oak Wood

Marble

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
0ak Wood-0w	351070W	351180W	351290W	351300W	351400W	351620W	351510W	351730W	352100W	351840W
Marble-MI	35107ML	35118ML	35129ML	35130ML	35140ML	35162ML	35151ML	35173ML	35210ML	35184ML

# **Deko Plates (Single Mounting Plates)**



Single Mounting Plates

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12Module	16 Module	18 Module
WHITE	21317WH	21328WH	21372WH	21339WH	21340WH	30431WH	21350WH	21361WH	20325WH	21383WH

# **Lira Plates with White Frame**



With White Frame

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal		9 Module Horizontal		16 Module	18 Module
Lira White	35286WH	35297WH	35300WH	35311WH	35322WH	35344WH	35333WH	35388WH	35355WH	35366WH	35377WH

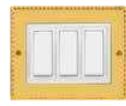
#### Solid Metal Plates with White Frame - Stainless Steel Brush Finished



Victorian SS

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	9 Module Horizontal	12 Module	16 Module	18 Module
Victorian SS	30726SS	30737SS	30748SS	30759SS	30760SS	30781SS	-	_	-	-	-

# Classic Gold Plates with White Frame - 24kt Gold Plated Casted Rope Border



24KT Gold Plated

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	9 Module Horizontal	12 Module	16 Module	18 Module
Classic Gold	21871GD	21882GD	21893GD	21907GD	21918GD	-	21929GD	-	21930GD	-	-

\* Do not use " Hard Cleaning Agent" for cleaning purpose.



# **New Tresa Cover Plates**



Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
White	30216CWH	30227CWH	30238CWH	30249CWH	30250CWH	30384CWH	30260CWH	30271CHW	T34680CHW	30282CWH
Black	30216CMB	30227CMB	30238CMB	30249CMB	30250CMB	30384CMB	30260CMB	30271CMB	34680CMB	30282CMB
Silver	30216CSL	30227CSL	30238CSL	30249CSL	30250CSL	30384CSL	30260CSL	30271CSL	34680CSL	30282CSL
Champagne	30216CCH	30227CCH	30238CCH	30249CCH	30250CCH	30384CCH	30260CCH	30271CCH	34680CCH	30282CCH
Pearl	30216CPL	30227CPL	30238CPL	30249CPL	30250CPL	30384CPL	30260CPL	30271CPL	34680CPL	30282CPL
Blue	30216CBL	30227CBL	30238CBL	30249CBL	30250CBL	30384CBL	30260CBL	30271CBL	34680CBL	30282CBL
Coffee Oak	30216CCO	30227CC0	30238CCO	30249CCO	30250CCO	30384CC0	30260CCO	30271CCO	34680CC0	30282CC0

 $\ensuremath{\bigstar}$  Do not use " Hard Cleaning Agent" for cleaning purpose.

# Roma Classic Mini Modular SP MCB 'C' Type

 98069
 UNO MINI Modular 6A SP 'C' MCB

 98070
 UNO MINI Modular 10A SP 'C' MCB

 98071
 UNO MINI Modular 16A SP 'C' MCB

 98072
 UNO MINI Modular 20A SP 'C' MCB

 98073
 UNO MINI Modular 25A SP 'C' MCB

 98074
 UNO MINI Modular 32A SP 'C' MC



Roma Classic Mini MCB SP

# Roma Classic Mini Modular DP MCB 'C' Type

98075 UNO MINI Modular 6A DP 'C' MCB 98076 UNO MINI Modular 10A DP 'C' MCB 98077 UNO MINI Modular 16A DP 'C' MCB 98078 UNO MINI Modular 20A DP 'C' MCB 98079 UNO MINI Modular 25A DP 'C' MCB 98080 UNO MINI Modular 32A DP 'C' MCB



# **New Tressa Base Frames**



Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
White	30216IWH	30227IWH	30238IWH	30249IWH	30250IWH	30384IWH	30260IWH	30271IWH	`34680IWH	30282IWH
Black	30216IMB	30227IMB	30238IMB	30249IMB	30250IMB	30384IMB	30260IMB	30271IMB	34680IMB	30282IMB
Silver	30216ISL	30227ISL	30238ISL	30249ISL	30250ISL	30384ISL	30260ISL	30271ISL	34680ISL	30282ISL
Pearl	30216IPL	30227IPL	30238IPL	30249IPL	30250IPL	30384IPL	30260IPL	30271IPL	34680IPL	30282IPL
Champagne	30216ICH	30227ICH	30238ICH	30249ICH	30250ICH	30384ICH	30260ICH	30271ICH	34680ICH	30282ICH
Red	30216IRD	30227IRD	30238IRD	30249IRD	30250IRD	30384IRD	30260IRD	30271IRD	34680IRD	30282IRD
Chrome	30216ICR	30227ICR	30238ICR	30249ICR	30250ICR	30384ICR	30260ICR	30271ICR	34680ICR	30282ICR
Gold	30216IGL	30227IGL	30238IGL	30249IGL	30250IGL	30384IGL	30260IGL	30271IGL	34680IGL	30282IGL

\* Do not use " Hard Cleaning Agent" for cleaning purpose.

# Power Unit (modular box with mini modular MCB)

98488	Modular AC Box With 20A SP MCB, Plastic Enclosure 8 Unbreakable Heavy Duty With ISI Plug Top
98489	Modular Surface AC Box With 20A SP MCB, Without Enclosure & Unbreakable Heavy Duty with ISI Plug Top
98491	Modular AC Box With 20A SP MCB, Metal Enclosure & Unbreakable Heavy Duty With ISI Plug Top
98492	Modular Ac Box With 20A DP MCB, Metal Enclosure & Unbreakable Heavy Duty With ISI Plug Top
98496	3M 25A SP MINI MCB in Plastic Enclosure / Top
98497	3M 25A SP MINI MCB W/O Plastic Enclosure
98498	4M 25A SP MINI MCB in Plastic Enclosure / Top
98499	4M 25A SP MINI MCB W/O Plastic Enclosure





98491 / 98492





98496 / 98497

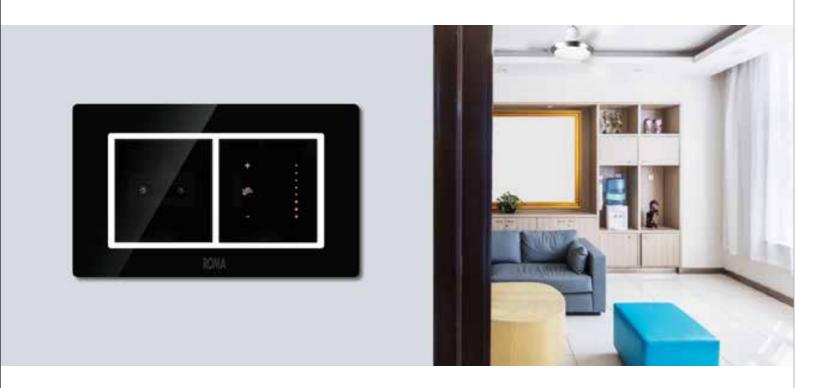
98498 / 98499

●● 38 39 **●●** 



# Modular Touch Switches

22945	1 Way, 1 Switch	100		100	
22950	1 Way, 2 Switch				
22954	1 Way, 4 Switch			5	San
22955	2 Way Switch	760	91 W		30
22960	20A, 1Way Switch			5 8	1
22965	Fan Regulator				100
22970	Dimmer	22945	22950	22954	22955
22975	Doorbell	22010	22000	22001	22000
22980	Curtain Control		100000000000000000000000000000000000000		
22981	DND MMR Unit (external unit)				
22982	DND MMR Unit (Internal unit)	240			
22985	Remote				
		22960	22965	22970	22975
		40.000		40.00	
					2000
		200 10	(8)		0000
		(B) W	<b>(2)</b>	<b>6</b>	
					2222
		22980	22981	22982	22985



# **Plates Dimensions**

Module	1 M	2 M	3 M	4 M	6 M	8 M Horizontal	8 M Vertical	9 M	10 M	12 M	12 M Horizontal	16 M	18 M
DEK0													
X(mm)	86	86	116	146	220	250	146	NA	NA	215	NA	260	220
Y (mm)	86	86	86	86	86	86	154	NA	NA	154	NA	154	222
TRESA													
X(mm)	94	94	118	151	219	262	152	NA	NA	220	NA	261	220
Y (mm)	90	90	90	90	90	90	154	NA	NA	154	NA	154	220
LIRA													
X(mm)	94	94	118	151	220	260	152	262	NA	220	NA	260	220
Y (mm)	90	90	90	90	90	90	154	90	NA	154	NA	154	216

# Floor Junction Box

Tioor sariotion Box	
35751 18 Module Floor Junction Box	35751

40 41







Woods wiring devices, for those who believe in style with comfort! Woods is our premium wiring devices range catering to the electrical requirements of residences, commercial and hospitality sector alike. Renowned for immaculate product design, superior finish, and stellar technology; it offers unrivaled operational comfort and safety. Switch on your own style statement with Woods!



Elegant and smooth gloss finish with accessories in Glossy white



Switch tested for 100000 On/Off switching operations



IP20 - No access of live parts by finger and hence Safe



Switches, Sockets & Regulators with ISI marking



IP20 - No access of live parts by finger and hence Safe



Collarless design: Accessories Front Installation & Removable



Captive Screw Terminals: Never to loose screws & Quick to install



UV stabilise FR grade PC material



Entire range adheres to BIS requirements





Woods Wiring Devices offer the unique feature of front removal from the frame for all mechanis, Superior aesthetics and sturdy frame aid in quik installation of all the accessories.

# EASY INSTALLATION FROM THE FRONT





# EASY REMOVAL FROM THE FRONT

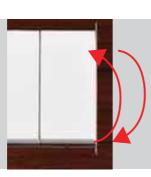






# 40,000 On & Off

Traditional ISI Marked Switches Benchmark criteria is 40,000 ON and OFF operations.



# 100,000

Woods exceeds ISI benchmark by whopping 60,000 ON and OFF operations. These are tested OK up to 100,000 Operations.

#### **IP 20 PROTECTION**

IP 20 Protection ensures that Live Parts are not exposed to fingures.



IP 20 Protection is provided in all switches and sockets.









Shrouded terminal offer optimum operations



# Captive Terminal Screws

#### CAPTIVE TYPE SCREWS:

- # Feditals hater and safer wing
- Screw driver does not slip during installation due to the support offered by shrouded terminal
- Screws do not fail from the shrouded terminal.

● ● 44 45 ● ●



# Switches 10AX Rated 240V~, SP



60013	10AX 1 Way Switch, 1M
60016	10AX 2 Way Switch, 1M
60019	10AX 1 Way Switch With Indicator, 1M
60022	10AX 1 Way Switch With Fan Mark, 1M
60025	10AX 1 Way Switch With Light Mark , 1M
60028	10A Bell Push Switch, 1M
60031	10A Bell Push Switch With Indicator, 1M
60034	10AX 1 Way Switch, 2M
60037	10AX 2 Way Switch, 2M
60040	10AX 1 Way Switch With Indicator, 2M
60043	10A Bell Push Switch, 2M
60046	10A Bell Push Switch With Indicator, 2M



# Switches 20A Rated, 240V~, SP



60058	20A 1 Way Switch, 1M
60061	20A 2 Way Switch, 1M
60064	20A 1 Way Switch With Indicator, 1M
60067	20A 1 Way Switch, 2M
60070	20A 2 Way Switch, 2M
60073	20A 1 Way Switch With Indicator, 2M



# Power Switches, 240V~



60085	25A S.P.1 Way Switch With Indicator, 1M $$
60088	32A D.P. Main Switch With Indicator, 2M





60100	6A 2 Pin URO Socket, 1M
60114	6A, 2 Pin Round Socket (with Shutter), ISI, 1M
60106	6A Multi Socket For 2 and 3 Pin Plug, 2M
60109	10A/20A Twin Socket, 2M
60110	6A/16A Twin Socket, 2M, ISI, 2M
60112	6A/10A/13A Combi Socket for all types of Pins, 2M
60018	10A, 3 Pin Socket, ISI, 2M



# Motor Starter Switch Single Phase, 240V $^{\sim}$

60154 20A Motor Starter Switch, 2M 60157 25A Motor Starter Switch, 2M



# Fan Regulators & Dimmers, 240V $\sim$ , 50Hz

60166	Fan Step Regulator Tiny EME 100W, ISI, 1M	A-MIN -1				
60172	Fan Step Regulator 100W, ISI, 2M		-	•		
61865	High speed fan Step regulator 100W, 2M	JR.	W.—	4		6-
60175	Mini 450 W Dimmer, 1M		A			
60178	Dimmer 650 W (For Incandescent Lamp), 2M				200	
60181	Dimmer 1000 W (For Incandescent Lamp), 2M	60166	60172	60175	60178	60181

# Support Modules

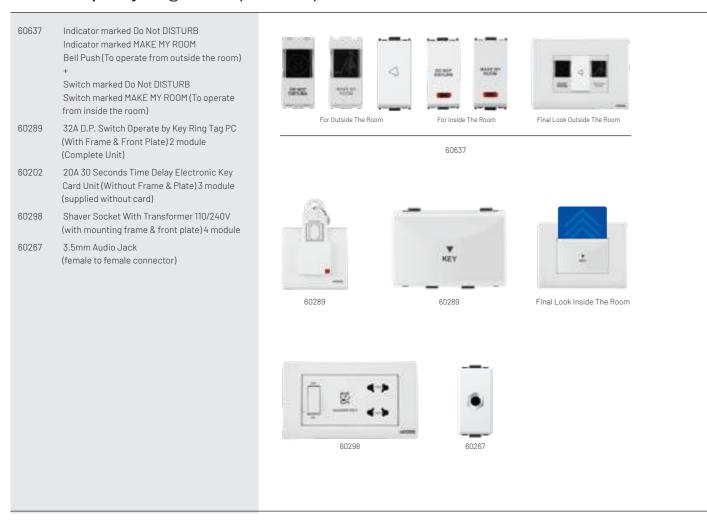
60217	Telephone Jack RJ11 Single With Shutter, 1M		S-Millet					
61859	RJ45 Computer Socket Cat 6, 1M							
61856	RJ45 Computer Socket Cat 5e, 1M		1,000					
60220	Telephone Jack RJ11 Double W/O Shutter, 1M		Service of					
60229	Adaptor only For At &T / Lucent Amps Avaya Cat5, 1M		172004					
61862	RJ45 Receptor, 1M	60217/6859 61856	60220	60229	61862	60265	60226	60232/60268 CAT 5 CAT 6
60265	Adaptor For At&T/Lucent Cat 6 With Shutter, 1M	01000						CAIS CAIS
60226	Computer/Modem Jack RJ45 With Shutter, 2M			2 =6		-		
60232	Computer/Modem Jack Cat 5 With Shutter, 2M	10000				0		
60268	Computer Jack Cat 6 For At&T/Lucent, 2M			6	3		THE ST	
60241	Fuse Unit For 16A Or 10A, 1M			4			100	
60205	Cord Outlet With Grip, 1M							
60208	TV Antena Outlet, 1M	60241	60205		208	60250	60244	60235
60250	Bell Indicator, 1M	00241	00205	bU	200	00200	00244	00235
60244	Neon Indicator (Red), 1M	matical and				collève		
60235	Blank Plate Single, 1M				1	1	10/20	100
60271	Buzzer, 2M		3	Ò	l.	)	D . 1	1.000
60148	1000mA, 5VDC, USB Charger, 1M		-35	TH.	-			
60281	2500mA,5VDC, USB Charger, 2M(CRS Certified)			USB 1000mA	200	4	USB	
60282	2100mA,5VDC, USB Charger, 1M (CRS Certified)	60271		60148	602	01	2100mA	30 • 10
60256	PIR Sensor (Wall Mounting), 12A, 240~, 50Hz Detector, 2M	00271		00146			60148	60256
60259	Compact Speaker 3W. rms, 2M			V				
60223	Volume Controller, 2M			N.				
60334	Indicator / Night Lamp With LED (Long Life), 2M							
60253	Down Light / Foot Light (LED - White) With Variable Shutter Regulates Light Output (3 Module White cool day Light)	60259		60223	Δ	6033	4	60253







# Hotel & Hospitality Range 240v~ (Unit 5 Nos) DND / MMR



# Stella White Glossy Finish (Front Cover Plates with Base Frame)



1	V	ŀ	٦i	÷.	_	
٧	٧	ı	Ш	U	C	

Glossy Finish	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Rectangular			16 Module	18 Module
White	61700WH	61703WH	61706WH	61709WH	61712WH	61715WH	61718WH	61820WH	61721WH	61724WH	61727WH

\* Do not use " Hard Cleaning Agent" for cleaning purpose.

# Matrix Glossy Finish (Front Cover Plates with Base Frame)



Colour Glossy Finish	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Rectangular	9 Module Horizontal	12 Module	16 Module	18 Module
White	60301WH	60304WH	60307WH	60310WH	60313WH	60316WH	60319WH	-	60322WH	60325WH	60328WH
lvory	60301IV	60304IV	60307IV	60310IV	60313IV	60316IV	60319IV	-	60322IV	60325IV	60328IV

<sup>\*</sup> Do not use " Hard Cleaning Agent" for cleaning purpose.

#### Matrix Metallic Finish



Colour Metallic Finish	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Twilight Grey	60337TG	60340TG	60343TG	60346TG	60349TG	60352TG	60355TG	60358TG	60361TG	60364TG
Jet Silver	60337JS	60340JS	60343JS	60346JS	60349JS	60352JS	60355JS	60358JS	60361JS	60364JS
Black Graphite	60337BG	60340BG	60343BG	60346BG	60349BG	60352BG	60355 BG	60358 BG	60361 BG	60364 BG

<sup>\*</sup> Do not use " Hard Cleaning Agent" for cleaning purpose.



● 48 49 ● ●



# Matrix Natural Finish (Front Cover Plates with Base Frame)





Colour Natural Finish	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Rose Wood	60373RW	60376RW	60379RW	60382RW	60385RW	60388RW	60391RW	60394RW	60397RW	60400RW
American Cherry	60373AC	60376AC	60379AC	60382AC	60385AC	60388AC	60391AC	60394AC	60397AC	60400AC

 $\ensuremath{\mbox{\textbf{\#}}}$  Do not use " Hard Cleaning Agent" for cleaning purpose.

# Matrix Hairline Finish





Hairline Brown - HW

Hairline Silver - HS

Colour Hairline Finish	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Hairline Brown	60478HW	60481HW	60484HW	60487HW	60490HW	60493HW	60497HW	60499HW	60502HW	60331 HW
Hairline Silver	60478HS	60481HS	60484HS	60487HS	60490HS	60493HS	60497HS	60499HS	60502HS	60331 HS

\* Do not use " Hard Cleaning Agent" for cleaning purpose.

# **Plates Dimensions**

Module	1M	2 M	3 M	4 M	6 M	8 M Horizontal	8 M Vertical	9 M	10 M	12 M	12 M Horizontal	16 M	18 M
MATRIX													
X(mm)	90	90	118	146	219	250	146	NA	NA	220	NA	250	220
Y(mm)	86	86	86	86	86	86	156	NA	NA	156	NA	156	220
STELLA													
X(mm)	90	90	118	146	219	250	146	251	NA	220	NA	250	220
Y(mm)	86	86	86	86	86	86	156	86	NA	156	NA	156	220







accessories such as sockets with child-locks, ISI certified switches and also a complete hospitality range of products to suit the needs of budget hotels and hospitals offering optimum comfort.



Glossy Finish



& Regulators with ISI marking



Captive Screw Terminals: Never to loose screws & Quick to install



Switch tested for 100000 On/Off switching operations



IP20 - No access of live parts by finger and hence Safe

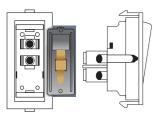


UV stabilise FR grade PC material



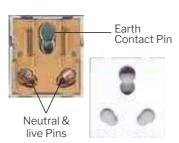
Switches with

# Arc Shield

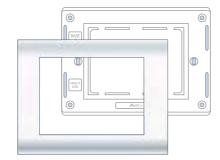


Safety of Operation ensured with Arc Shield while the Sleek & Stylish look complements the aesthetic appeal of the modern space interiors.

Sockets



Rider uses the inherent elastic properties of phosphor bronze with state-of-the-art design to provide the ultimate complete action contact sockets. Regd. Design



Combination of *Regency*Front plate with base frame

Rider is a world class range of wiring devices and accessories, unique in design and technology. Seamless Research & Development enables Rider Wiring Devices Range to be class-apart with its products meeting the international quality standards & offering ultimate value for money.

The plate unit is assembled by fixing functional modules to the base frame which is mounted on the wall boxes. The assembly is then covered with a front plate.

Functional Module

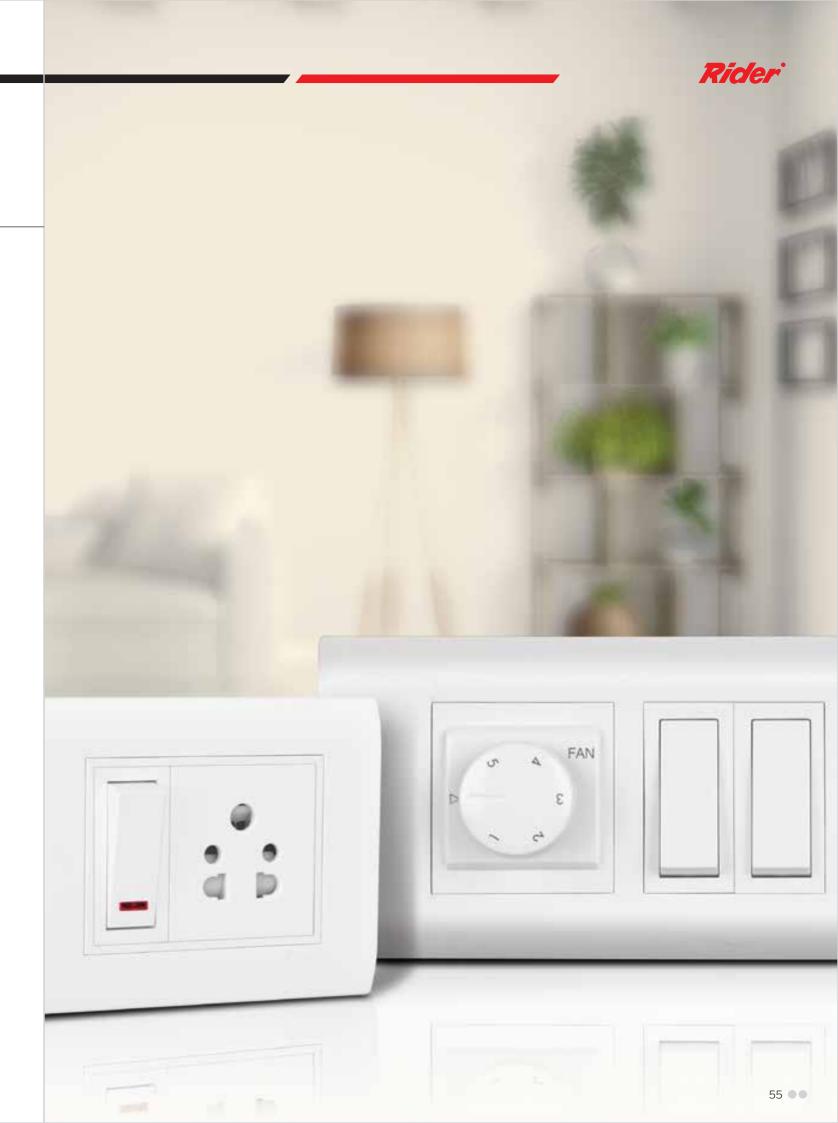
Wall Box

Base Frame

Front Plate

Front Plate

Front Plate





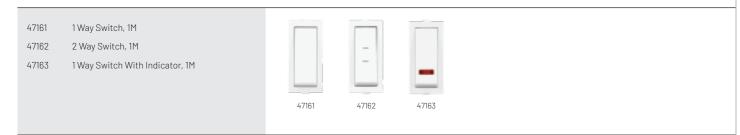
# Slim Switches 6A, 240V~

47101 1 Way Switch, 1M 2 Way Switch, 1M 47102 47103 1 Way Switch With Indicator, 1M 47104 Bell Push Switch, 1M 47105 Bell Push Switch With indicator, 1M 47102

# Mega Switches 6A, 240V~

47201	1 Way Switch, 2M			Plan Tile	
47202	2 Way Switch, 2M		_		
47203	1 Way Switch With Indicator, 2M		-	<u></u>	4
47204	Bell Push Switch, 2M				
47205	Bell Push Switch With Indicator, 2M	47201	47202	47203	47204/47205

# Slim Switches 16A, 240V~



# Mega Switches 16A, 240V~



#### Power Switches 240V~

**9** 56



# **Motor Starter Switches**

47420 47425	20A Motor Starter Switch, 2M 25A Motor Starter Switch, 2M	0 🗷		
		47420	47425	

# **Sockets**

47401 2 Pin Round Socket, 1M	
47312 Uro 2 Pin Socket, 1M	6
47368 6A, 2 Pin Round Socket (with Shutter), ISI, 2M	• •
47323 Uni Socket For 3 Pin & 2 Pin, 2M	4 2
47325 Multi Socket For 3 Pin & 2 Pin 47401 47312 47323	47325
(Ideal for cell phone charger), 2M	
47366 6A/16A , Twin socket, ISI, 2M	
47363 Combi Socket For All Pins,6/10/13A, 2M	
47367 16A 3pin Socket, ISI, 2M	•
47369 6A 3pin Socket, (With Shutter)	
47366 47363	47367

# **Fan Regulators & Dimmers**

47513	Fan Step Regulator tiny 100W 240V-50Hz EME, 1M		V . M	•		FIRS
47500	Fan Step Regulator Mega 100W 240V~50Hz EME , 2M		2 - 4	0		Sad
47172	High speed fan regulator 100W 240V~50Hz, 2M	47513	47500	47545	47565	47172
47545	Dimmer Single Tiny 450W, 1M					
47565	Dimmer Mega 650W, 2M					

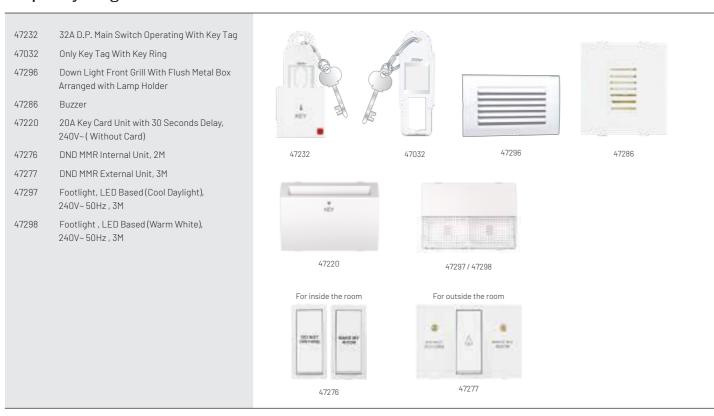
57



# **Support Module**

47611	RJ 11 Tel. Jack Single With Shutter, 1M						
47622	RJ 11 Tel. Jack Double W/O Shutter, 1M		80				
47679	2M, 2 Port, USB Charger, 2M (CRS Certified)	_					
47680	USB Charger 2100mA,5VDC, 1M (CRS Certified)		-		July A		
47644	RJ 45 Modem Jack For Computer With Shutter, 2M	47611	47622	location (	47679		
47655	Cat 5 Frame Only suitable For Avaya Lucent (AT&T), 1M						
47666	Cord Outlet With Grip, 1M						
47677	TV. Socket Outlet, 1M						
47681	Fuse For 16 Or 10A, 1M						
47682	Neon Indicator Red, 1M	47644		47655	47666	47677	
47683	Bell Indicator, 1M						
47684	Blank Plate Single, 1M			anni Glasso			
47685	Blank Plate Double, 2M	•					
					-		
		USB 2100mA					
		47680	47681	47682	47683	47684	47685

# **Hospitality Range**



# **REGO - Single Mounting Plates**

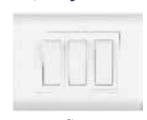
# Rego



MODULE	1 Module	2 Module	3 Module	4 Module	6 Module	8 Modtule	8 Module Horizontal	12 Module	16 Module	18 Module
Code	48101	48102	48103	48104	48106	48108	48110	48112	_	-
Dimensions (W x H)	86 x 86	86 x 86	116 x 86	146 x 86	220 x 86	146 x 154	249 x 86	215 x 153	-	-

# **REGENCY - Front Plates With Base Frame**

# Regency



Glossy

MODULE	1 Module	2 Module	3 Module	4 Module	6 Module	8 Modtule	8 Module Horizontal	12 Module	16 Module	18 Module
Code	48201	48202	48203	48204	48206	48208	48210	48212	48216	48214
Dimensions (W x H)	94 x 90	94 x 90	118 x 90	151 x 90	220 x 90	151 x 154	262 x 90	220 x 154	262 x 154	220 x 210

#### **Plates Dimensions**

Module	1 M	2 M	3 M	4 M	6 M	8 M Horizontal	8 M Vertical	9 M	10 M	12 M	12 M Horizontal	16 M	18 M
REGO													
X(mm)	86	86	116	146	220	250	146	NA	NA	215	NA	NA	NA
Y(mm)	86	86	86	86	86	86	154	NA	NA	154	NA	NA	NA
REGENCY													
X(mm)	94	94	118	151	220	261	151	NA	NA	220	NA	262	220
Y(mm)	90	90	90	90	90	90	154	NA	NA	154	NA	154	210

\*Do not use "Hard Cleaning Agent" for cleaning purpose

● 58 59 **●** ●







Gloss finish with accessories



Captive Screw Terminals: Never to loose screws & Quick to install



IP20 - No access of live parts by finger and hence Safe



Switch tested for 100000 On/Off switching operations



2 in 1 Socket with Urea backpiece



Switches, Sockets & Regulators with ISI marking









And now it is time to introduce the successor to this rich legacy, an heir that'll make you proud of building priceless moments for the generation next. Carrying the trust of unparalleled safety, the bold yet brilliant aesthetic appeal much akin to your future generation and the promise of retaining the light of love in your life comes a brand new offering from India's first Piano Switch - Anchor Penta.

Switch on the Joy with Penta Modular. It's truly... A Legacy Reborn!



& Rich Decor...



# 2 IN 1 SOCKET WITH UREA BACKPIECE



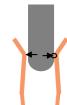
# **Properties of Urea Formaldehyde**

High Melting Point of 850 degrees
Does not catch fire
Does not drips on burning
Safe to Install and use

# **UNIFORM INSERTION & WITHDRAWAL FORCE - LONG LIFE**

#### Penta Modular Socket





Contact point is always

Insert force does not change. Insertion Withdrawal force is uniform.

Very soft and proper connection lasts longer

Same performance even after 10 years

#### **Regular Socket**





Contact point moves downwards

Deeper the insertion, more the insertion force. Insertion / Withdrawal force is not uniform.

Hard and it goes easily loosen

Broken suddenly

#### **BIGGER DIMENSION WIRE HOLES**

#### Penta Modular Socket



Area of the hole: 14.6 mm<sup>2</sup>

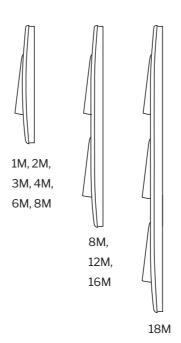
#### **Ordinary Socket**



Area of the hole: 10.2 mm<sup>2</sup>

#### **UNIFORM DESIGN**

- Plank – Curvy design is maintained in all the modules to create the uniformity



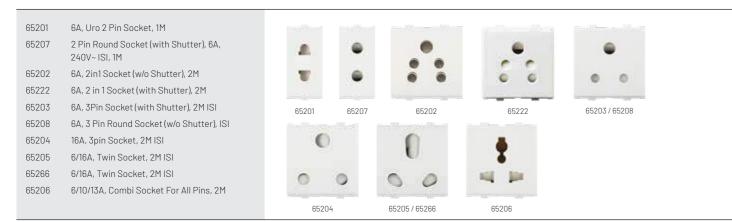
●● 62 63 ●●



#### **Switches** S)



#### **Sockets**



# **Support Function**

65503	Blank Plate, 1M		Consumor of					pulting at the
65504	Neon Indicator, Red, 1M		1000					
65508	6A Resettable Fuse Unit, 240V~, 1M		153		п		n	111
65509	16A Resettable Fuse Unit, 240V~, 1M		100		LICE		LICE	III
65505	USB Charger - 1000mA, 5V DC, 1M		Birth.	AND STREET	USB 1000mA	STATE OF THE PARTY	USB 2100mA	
65506	USB Charger, 2 Port, 2.5A. 5V DC , 1M	-	100	-				
	(CRS Certified)	65503	65504	65508 65509	65505	65506	65611	65710
65710	Buzzer, 2M			00008				
65611	USB Charger-2100mA, 5VDC, 1M (CRS Certified)							

# **Support Function**



#### **Communication And Data Socket**

65501	Cord Outlet, 1M	- 45	100				
65502	TV Socket outlet, 1M						
65610	RJ11, Tel Jack with Shutter, 1M	6					
65620	RJ45, Receptor, 1M		0	-	-	-	-
65621	RJ45, Computer Jack, Cat5e, 1M				4690	493	4690
65622	RJ45, Computer Jack, Cat6, 1M	65501	65502	65610	65620	65621	65622

# **Foot Light**

65705	FootLight LED Based with 3M Plate (Cool Day Light) 230V~50Hz		
65706	FootLight LED Based with 3M Plate (Warm White Light) 230V~50Hz	THE PARTY OF THE P	100 100
65705-C	FootLight LED Based with 3M GINA Plate (Cool Day Light) 230V~50Hz		
65706-C	FootLight LED Based with 3M GINA Plate (Warm White Light) 230V~50Hz	65705 / 65706 / 65711	65705-C / 65706-C / 65711-C
65711	Emergency LED Light Unit		

#### Fan Regulator (240V-50Hz)

65711-C Emergency LED Light Unit with 3M Gina Plate

65301	100W, Tiny Fan Regulator, 1M		0.000	and the second	0000 TO VIEW
65302	100W, Dura Fan Regulator, 2M	2 3	3	3/	3
65303	100W, High Speed Fan Regulator, 2M			4	*
65322	100W, Dura Fan Regulator, 2M ISI	OFF	of the same of the	on on	of
		65301	65302	65303	65322

Ideal for controlling Fan Motors (inductive Loads)

# Dimmer (240V-50Hz)

65401	450W, Tiny Dimmer, 1M		
65402	650W, Dura Dimmer, 2M		
65557	150W, LED Dimmer, 2M	(°)	( 0 )
		OFF	OF
		65401	65402 / 65557

Ideal for controlling Incandescent bulbs and Halogen Bulbs (Resistive Loads)

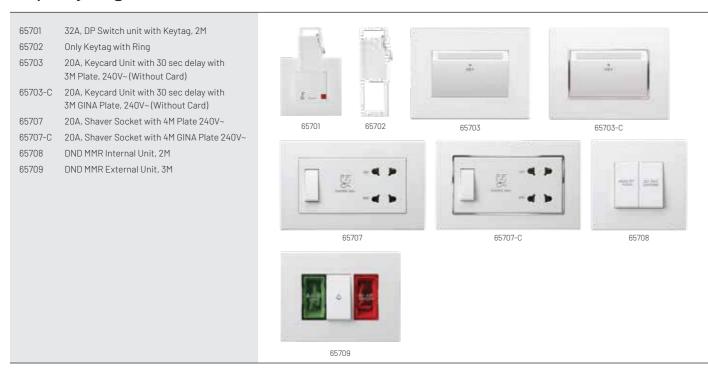


 $16A, 20A, 25A \ Switch \ not \ suggested \ for \ geyser \ load. \ Instead \ MCB/Motor \ Stater \ must \ be \ used.$ 





# **Hospitality Range**



#### **Uno Mini Modular MCB**







3kA 

65989 6A DP 'C' Mini MCB 65990 10A DP 'C' Mini MCB 65991 16A DP 'C' Mini MCB 65992 20A DP 'C' Mini MCB 65993 25A DP 'C' Mini MCB 65994 32A DP 'C' Mini MCB



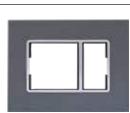


MCB DP

# **Regular Plates**



**Gina Plates** 



White

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Regular (White)	65901	65902	65903	65904	65906	65908	65988	65912	65916	65918
Regular (Black)	65901B	65902B	65903B	65904B	65906B	65908B	65988B	65912B	65916B	65918B
GINA (White)	65801	65802	65803	65804	65806	65808	65888	65812	65816	65818
GINA (Black)	65801B	65802B	65803B	65804B	65806B	65808B	65888B	65812B	65816B	65818B

#### Plates Suitable for Wodden Boxes



Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Square	8 Module Horizontal		12 Module	16 Module Horizontal	18 Module
Code No.	65551	65552	65553	65554	65556	65588	65558	65560	65512	65562	65518

# **Designer (Colour Plates)**









Misty Green

Basalt Grey

Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
French Fchsia	65901FF	65902FF	65903FF	65904FF	65906FF	65908FF	65988FF	65912FF	65916FF	65918FF
Pastel Green	65901PG	65902PG	65903PG	65904PG	65906PG	65908PG	65988PG	65912PG	65916PG	65918PG
Misty Green	65901MO	65902M0	65903MO	65904M0	65906MO	65908M0	65988MO	65912MO	65916MO	65918MO
Basalt Grey	65901BG	65902BG	65903BG	65904BG	65906BG	65908BG	65988BG	65912BG	65916BG	65918BG



**6**6 67

# Exima Plates







Golden Pecan

Chocolate Hardwood

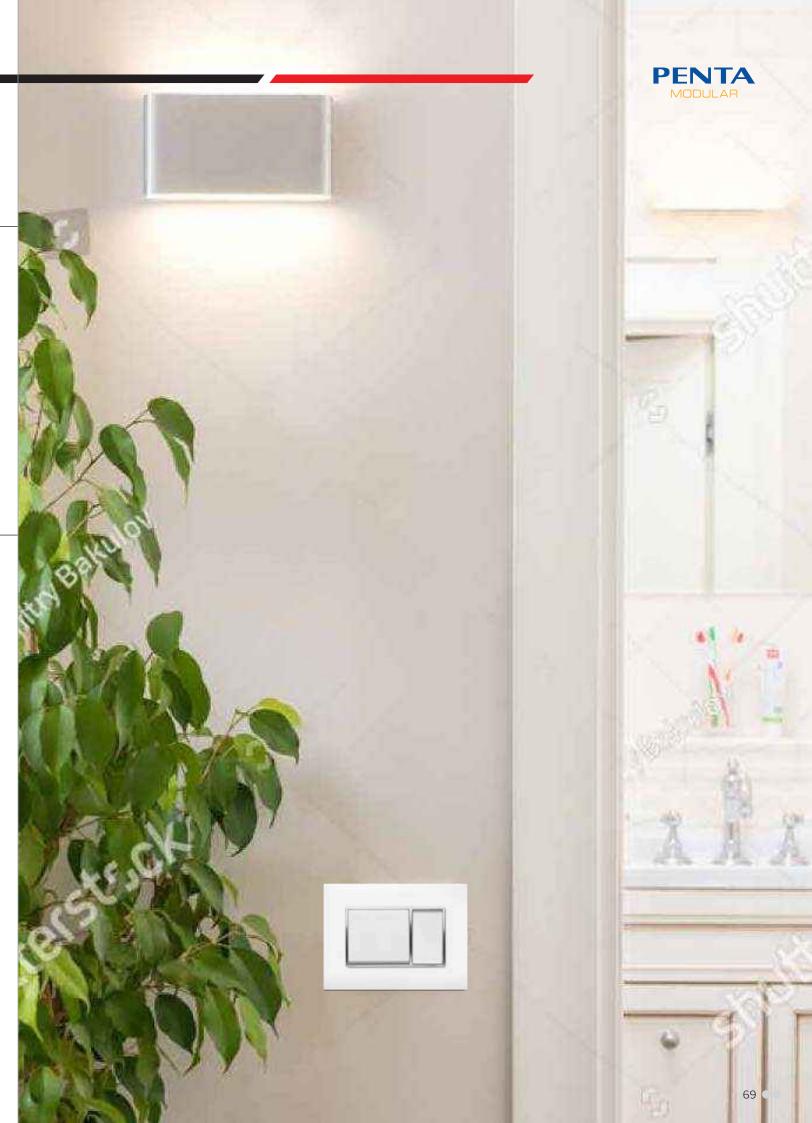
Black Ebor

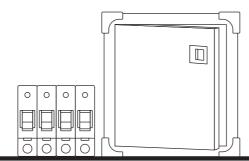
Module	1 Module	2 Module	3 Module	4 Module	6 Module	8 Module Horizontal	8 Module Vertical	12 Module	16 Module	18 Module
Golden Pecan	65901WGP	65902WGP	65903WGP	65904WGP	65906WGP	65908WGP	65988WGP	65912WGP	65916WGP	65918WGP
Chocolate Hardwood	65901WCH	65902WCH	65903WCH	65904WCH	65906WCH	65908WCH	65988WCH	65912WCH	65916WCH	65918WCH
Black Ebony	65901WBE	65902WBE	65903WBE	65904WBE	65906WBE	65908WBE	65988WBE	65912WBE	65916WBE	65918WBE

# **Plates Dimensions**

Module	1 M	2 M	3 M	4 M	6 M	8 M Horizontal	8 M Vertical	9 M	10 M	12 M	12 M Horizontal	16 M	18 M
PENTA PLUS													
X(mm)	94	94	118	146	220	260	146	NA	NA	220	NA	260	220
Y (mm)	90	90	90	90	90	90	154	NA	NA	154	NA	154	220
WOODEN BOXES													
X(mm)	114.3	114.3	127	165	215.9	269.2	165	NA	322.6	215.9	322.6	NA	266.7
Y (mm)	114.3	114.3	114.3	114.3	114.3	114.3	165	NA	114.3	165.1	114.3	NA	216



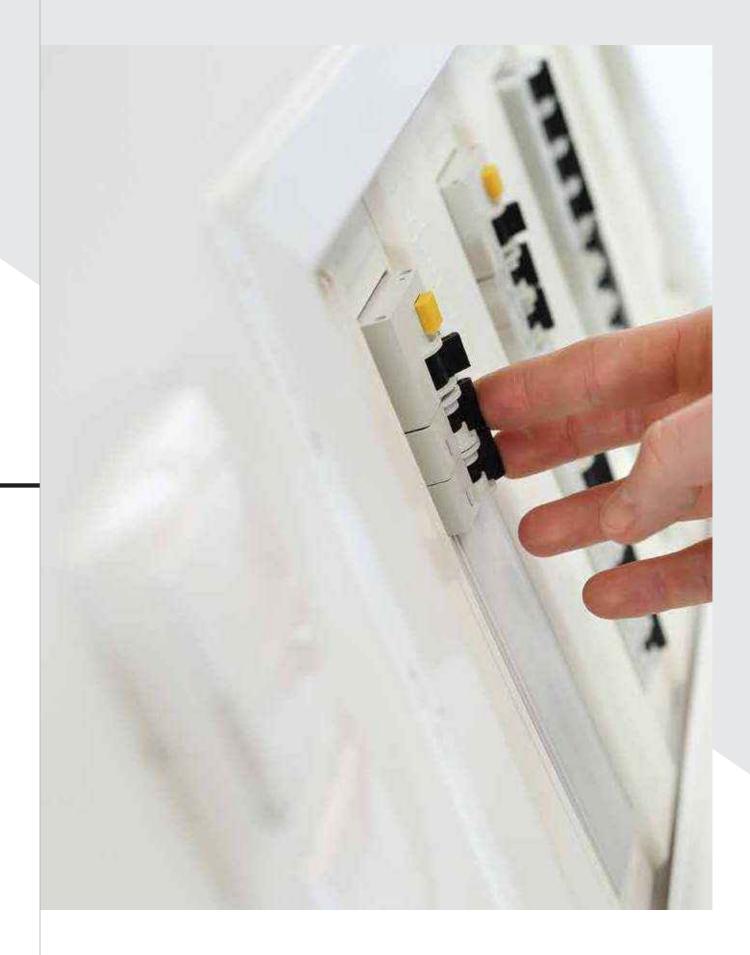




# switchgears

# Complete protection range

Our range of switches delivers unmatched comfort, exquisite designs, luxury and superior technology. Being a major player in the electrical switches and switch accessories segment for over five decades, Anchor strives towards fostering growth through ingenious solutions and absolute value.



●● 70 71 ●●



Raising the Paradigms of Sustainable and Innovative Switchgear

Security is not just a need; it is an essential attribute of individual life. Electrical security is one of the primary needs of every premise be it a home, an office, a hotel, a library, a hospital, a school or a shop.

The origin of UNO Switchgear stems from this basic aspect of electrical security. Its primary aim is to secure lives, precious appliances and the premises from electrical hazards. Path-breaking technology of Panasonic makes this complete range class-apart from the ordinary.



## SIMPLER, SAFER AND COMFORTABLE

The journey of five decades and the trust of millions of Indians continues to inspire and aid us in ushering in newer developments in the electrical building constructions business. Today, Anchor Electricals Pvt. Ltd. is a vital part of the Eco-Solutions Company of Panasonic Corporation Japan.

Backed with the legacy of the nation's trust for fifty long years and the vision of manufacturing products to make lives of our customers safer and comfortable has enabled it to reach this far. Since 1963, Anchor has constantly endeavoured to deliver path-breaking products to India and neighbouring markets. Today it has a thriving business presence in five verticals of electrical building constructions business, namely switches and accessories, switchgear and protection devices, lighting, wires and cables and fans.

The journey of fifty years has been made memorable with some enviable firsts such as

- First organized player that started manufacturing tumbler switches in 1963
- In 1973 introduced India to the first Piano Switch under the brand 'Penta' which incidentally is the first non-modular switch of India
- · Concept of Plates for Modular switches with Roma in 1993
- Introduced India to Fire Retardant Wires in 1999
- · First in the country to receive an ISO certification
- First in the country to stop profitable production and distribution of incandescent (GLS) bulbs as an active step for preserving the environment
- Introduced India to the first Screwless Terminal Switch in the country as well as Touch Switch under the brands
   Panasonic Vision and Ave

In the near future, Anchor will explore newer dimensions through Energy Generation, Management & Conservation expanding itself across the solutions space in the electrical building constructions business. It is presently set to step into the energy generation vertical by exploring Solar ventures for the nation's development through solutions from Panasonic.

#### ANCHOR SWITCHGEAR VERTICAL AND ITS ONGOING COMMITMENT

Anchor's Switchgear Unit constantly endeavours to bring alive a complete sense of electrical security and safety to assorted spaces and premises across the nation.

Public Spaces, Health care and Hospitality.



Residential Industrial

IT Technology

Commercial Building

●● 72 73 **●●** 



## **MANUFACTURING & QUALITY**

Anchor's Switchgear is manufactured in its state-of-the-art facility at Haridwar, currently possessing an annual capacity of manufacturing over 20 million switchgear products.

Panasonic technology has brought in its best practices that have been fine-tuned for nearly a century. Since 2012, Anchor has started manufacturing the RoHS compliant switchgear range under the brand Panasonic. This facility is equipped with best-in-class manufacturing technology. The Moulding section houses the latest L&T injection moulding machines; latest automatic welding machines and an in-house welding shop. Some of the most advanced technological instruments such as Semi-automatic yoke riveting machines, Production test equipments-testing panels and HV testing machines ensure consistent up-gradation in the manufacturing standards. Anchor's Testing Lab is also equipped with latest instruments for "RoHS compliance" testing. It is extensively focussed on upgrading the testing machinery ensuring consistency in the product quality through specialized instruments like 10x profile projector/salt spray chamber & spring load testing machines.

The Haridwar facility is certified by TUV for ISO- 9001-2008. All switchgear products are manufactured and tested as per the IS/IEC standards defined by BIS.

In 2011, Anchor started its Switchgear Design and Development Centre in New Delhi. Panasonic has brought in stellar innovation in this business vertical of Anchor bringing in the globe's best technology offerings to India.



Automatic riveting machine



Magnetic tripping test machine



Thermal calibration & verification bench



## **UNO SWITCHGEAR**



This range offers optimum security to assorted premises through a wide range of product offerings. Stellar designs, superior mechanisms, long operational life, ease of installation and operation and its adherence to IS/IEC standards makes this the perfect fit for modern premises. The UNO Switchgear Range is the latest offering from the house of Anchor, comprising of premium Distribution Boards, AC Boxes, MCBs, RCCBs, Isolators & Mini-MCBs (Modular & Non-Modular).

The UNO distribution boards range is equipped with stylish color, elegant curves and a distinctive finish that blends with all kinds of interior décor and provides a new dimension of protection in homes, offices and industries. It offers dual benefits of flexibility and safety, thus enabling safe and efficient distribution of electrical power. IP 43 degree protection, reversible door and pan assembly are some of the unique offerings provided through this series. The AC Boxes from UNOoffer IP 30 Protection, boast of aesthetic design and are manufactured in adherence to IS 8623.

A sustainable and unique offering from Anchor, the UNO Switchgear rings in a new dimension of security for modern spaces due to its best-in-class manufacturing processes, use of superior raw-materials and stringent quality control adding to the comfort and safety of millions of Indians.

The UNO Mini-MCB range comprises of the most compact circuit breakers available in the world, incorporating all the safety features of a traditional MCB. This is one of Anchor's speciality range that carries an ISI marking as well as complies with IS/IEC standards. UNO MCB boasts of high speed & high breaking capacity mechanism, mid-trip feature and is also energy-efficient. UNO RCCB is one of the fastest tripping RCCBs (under earth leakage current), operates at low voltage and has high short current withstand capacity. UNO Isolator carries its uniqueness with a maximum terminal capacity of 50 sq. mm, clear on-off Indication and offers unparalleled safety by being in accord with IS/IEC 60947-3.

●● 74 75 **●●** 

switchgears





# 20 million poles

per annum and growing!



## **MINIATURE CIRCUIT BREAKER (MCB)**

## ASSURED SAFETY FROM ELECTRICAL HAZARDS

Engineered to deliver optimum security to the heavy electrical appliances of your home and office, the Anchor UNO MCB range becomes a cherished partner of the premise. Powered by Panasonic technology, this range is designed by the finest brains of India and Japan.

These Circuit breakers secure the premise from electrical fire caused due to short circuits. Its exclusive mid-trip function makes it easy to identify circuit fault as a knob stays in centre in case of overload or short circuit. Manufactured with superior fire-resistant plastic parts, which prevent abnormal heating and offer resistance against strong impacts. The high short-circuit breaking capacity of 10000A (10kA).

## UNO MCB at a glance

- · State-of-the-Art Design
- · High Speed and High Breaking Capacity Mechanism
- · Independent Manual Operation
- Mid-Trip Feature
- · Flame Retal of Housing and Cover
- · Easy Mounting with Two Steps DIN Rail Clip
- · Contact Position Indicating Window
- · Trip-Free Mechanism
- · Bus bar and Cable Connection Facility
- Energy-Efficient MCB
- · Large Cable Terminals
- · IP 20 Degree Protection



#### Salient Features

Flame Retardant Material of Housing and Cover

• Bus bar and Cable Connection Facility

· Easy Mounting with Two Steps DIN rail clip

· Positive Contact Indication

 Rated Short Circuit Breaking Capacity 10000A(10kA)

- · Trip Indication
- Padlocking Facility
- · Safety Shutters
- · Low Watt loss



●● 76 77 ●●



#### KEY FEATURES OF UNO MCB

**State-of-the-art design:** UNO MCB is elegant in appearance, has a dumbbell shaped knob for easy holding and operation.

**Position Indicator:** UNO MCB has a positive contact position indicator to identify the ON/OFF position of the MCB.

• Red shows MCB in ON state • Green shows MCB in OFF state

**Rated Short Circuit Breaking Capacity 10kA:** UNO MCB can break high short-circuit fault currents under the conditions of Single phase and Three phase faults, thus protecting the types of equipment and cables from damage.

**Mid Trip Indication:** UNO MCB is equipped with a trip indication feature. This is an in-built feature reflecting the difference between OFF and TRIP (during fault) of MCB.

**Current Limiting Design:** UNO MCB operates with high-speed mechanism in which electro-dynamic forces set up by the heavy current due to short-circuit, separate the contacts several times faster, before it could reach the peak value, thus suppressing the high current.

**Trip-Free Mechanism:** UNO MCB freely trips open during fault condition, even if the knob is held in the ON position. Tripping cannot be by-passed by holding the tripping mechanism, thus ensuring the safety of the connected loads.

**Energy-Efficient:** UNO MCB has lower watt loss values compared to the specification of Indian standards. Thus, it runs at a cool temperature. Due to lower wattage loss, it can effectively be termed an energy efficient.

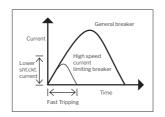
#### POWER LOSS IN WATT PER POLE

Rating (Amp.)	As Per IS.IEC Maximum watt loss	Uno MCB Maximum watt loss in SP
6	3.00W	0.78W
10	3.00W	1.74W
16	3.50W	2.4W
20	4.50W	2.8W
25	4.50W	2.2W
32	6.00W	2.23W
40	7.50W	3.4W
63	13.00W	5.6W











**Bi-Connect Terminals:** UNO MCB is equipped with a bi-connect termination that allows connection of either cable or bus-bar for making connections.

**High Conductor Capacity:** UNO MCB has high terminal capacity of 35 sq. mm that allows using Aluminium conductors or bus-bars for connection, thus saving cost of installation in switchboards.





**Plastic Material:** The plastic material used is High performance engineering plastics, which meets a glow wire test of 960 degrees. The plastic material used is sourced from world-class manufacturers.

**IP 20 Degree Protection:** UNO belives in safety first. Finger-proof terminals eliminate chances of accidental contact with live parts as all of them are shrouded/inaccessible, ensuring safety of installers.





**Certificates:** UNO MCB is ISI marked as per IS/IEC 60898-1:2002. The third party tests are done at CPRI, ERDA. A design registration patent is also registered.

**Padlocking Facility:** Padlocking facility of the Dolly ensures operational safety during maintenance.

- OFF position for personal safety during maintenance
- ON position for extremely critical load





Suitable for Isolation: UNO MCB guarantees complete electrical isolation of the downstream circuit when switched off, thus enhancing safety for users.

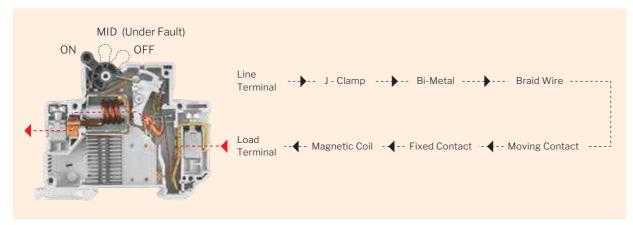




#### **TECHNICAL SPECIFICATIONS**

SR. NO.	FEATURES	UNO MCB
1	Standard Conformity	IS/IEC 60898-1:2002
2	Rated Current (In)	6A to 63A
3	Poles	SP, SP+N, DP, TP, TP+N, FP
4	Tripping Characteristics	B(SP), B & C
5	Rated short circuit breaking capacity (Icn)	10,000A
6	Rated Voltage (Un)	240 / 415V~ AC
7	Rated Frequency (f)	50 Hz
8	Rated Insulation Voltage (Ui)	660V
9	Rated Impulse Voltage (Uimp)	4 kV
10	Di-electric Strength	2.5 kV
11	Terminal Capacity	Line: 35 mm <sup>2</sup> (max.) & Load: 25 mm <sup>2</sup> (max.) copper
12	Ambient working temperature	-5 to 50 °C
13	Protection class	IP20
14	Relative Humidity	95%
15	Vibration	3 g
16	Endurance (Mechanical)	20000 operations
17	Endurance (Electrical)	10000 operations (In<32A)/5000 operations (In>32A)
18	Wattage Loss	As per IS/IEC Standards
19	Design	Current limiting design
20	Case & cover material	Moulded, Flame retardant plastic
21	Switching mechanism	Manual & Trip-free mechanism
22	Tripping mechanism	Thermal -Magnetic
23	Installation position	Vertical/horizontal
24	Contact position indication	Yes
25	Trip fault indication	Mid Trip Feature
26	Knob padlocking	Yes
27	Termination	Bi-connect (Bus bar/cable) can be used
28	Mounting	Din-Rail mounted (35 x 7.5 mm)
29	Certifications	ISI marked, Certificates from CPRI, ERDA
30	Design Registration Certificate	Registered, Design Registration Number: 252903

#### HOW DOES THE CURRENT FLOW IN THE MCB?

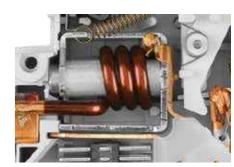


#### **TECHNICAL SPECIFICATIONS**

Thermal Tripping (Over Load Protection): The Over Load Protection is achieved with a thermal Bi-Metal Strip made from a combination of different materials with each material having a different linear expansion coefficient. The composite products are rolled into a strip under the high pressure. The change in temperature produces a change of curvature. One side of the Bi-Metal supports are fixed & uneven expansion of Bi-Metal causes bending of the strip. The bending strip hits the latch spring & knob mechanism, hence the MCB trips. The overload protection works only up to the level where magnetic tripping starts.



Magnetic Tripping (Short-Circuit Protection): Magnetic Tripping is based on the electromagnetic principle. When short circuit, measured generally in (kA) comes through the solenoid, electromagnetic force is induced in the plunger that strikes on the latch ensuring immediate release of the tripping mechanism causing the contacts to open. Fast mechanism design enables fastest tripping of the UNO MCB. On opening of contacts, arc (Column of ionized gases) is generated at the point of contacts matching. The components are designed so that the arc moves into the arch chutes and arc is quenched inside the arc chutes under the principle of the arc splitting.



#### TRIPPING CHARACTERISTICS & APPLICATIONS

**"B" - Tripping Characteristics:** Resistive Load: Tripping current setting of 3 to 5 times the rated current(In).

 $\label{lem:Applications: Suitable for lighting and distribution circuits.}$ 



**"C" - Characteristics: Inductive Load:** Tripping current setting of 5 to 10 times the rated current(In).

**Applications:** Suitable for Inductive & Motor Circuits with high Inrush current.



**"D" - Characteristics:** Short circuit release is set to 10-20 times for protecting circuits that cause heavy surge currents.

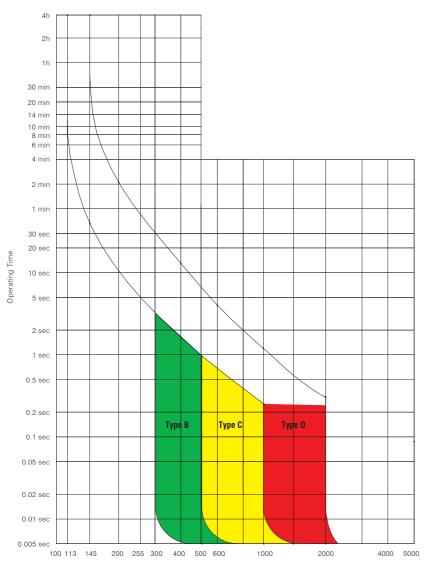
**Applications:** Very High Inrush (Up to 10 times of In) suitable for use in Welding machines, X Ray machines and Load that is close to the transformer, Power supplies, Heaters, Reactive load (heavy), IT industry UPS supplies and Medical Equipments.



●● 80 81 ●●



## TRIPPING CHARACTERISTICS - CURVE TYPE B, C & D



Current (% of rated current)

## TRIPPING CHARACTERISTICS - CURVE TYPE B, C & D

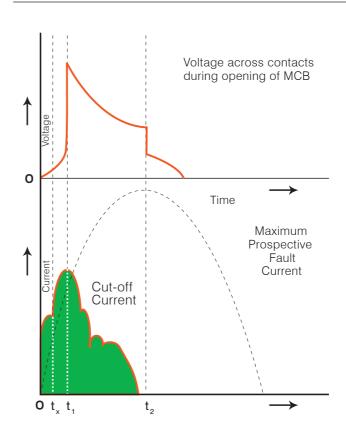
SR. NO.		Thermal Trippin	g	N	lagnetic Trippi	ng
Type Curve	Non-Tripping Current (A)	Tripping Current (A)	Tripping time In < = 63A	Hold Current	Trip Current	MCB Tripping Time (t)
В	1.13 in	-	>1hour	3 in	-	t >= 0.1s
-	-	1.45 in	<1hour	-	5 in	t >= 0.1s
С	1.13 in	-	>1hour	5 in	-	t >= 0.1s
-	-	1.45 in	<1hour	-	10 in	t >= 0.1s
D	1.13 in	-	>1hour	10 in	-	t >= 0.1s
-	-	1.45 in	<1hour	-	20 in	t >= 0.1s

## THEORY OF CURRENT LIMITING

**Current Limiting Class (i2t):** UNO MCB trips below the cut-off level before reaching the prospective current. Let through energy is kept low to reduce the thermal and dynamic stress. Thermal (joule integral i2t) & Dynamic is square of the peak value of the fault current, resulting in low power loss to avoid required back-up protection as a HRC. Class 3 is a design of MCB which trips fastest during short-circuit condition.

**Current Limiting Mechanism:** The tripping and arc control mechanism of UNO MCB is designed such that under the short-circuit condition, the contacts are physically separated with high speed and the electro-dynamic forces set up by fault current assist the extinction in less than half cycle.

## CURRENT LIMITING GRAPH

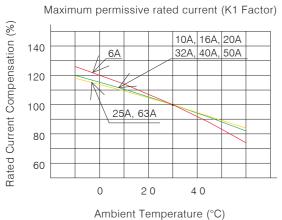


0	Point of initiation
tx	Contact opening time
t1	Current / Voltage peak (i.e. current limitation)
t2	Time to total extinction of arc (i.e. complete shutdown of fault current)

●● 82 83 ●●

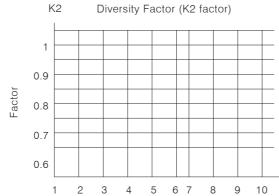


## AMBIENT TEMPERATURE COMPENSATION / DIVERSITY FACTOR CHART



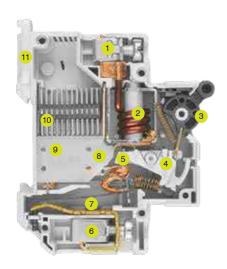
0.7 0.6

Calculation  $In/MCB = K1 \times K2 \times In$ In is Rated current of MCB



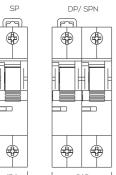
No. of Poles placed together with gap in between

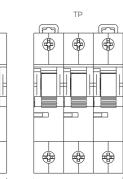
## INTERNAL MECHANISM OF OPEN UNO MCB WITH NOMENCLATURE

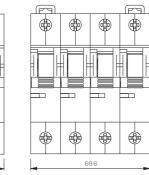


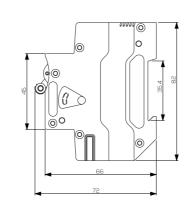
- 1 Upper Terminal
- 2 Magnetic Coil (Magnetic Tripping)
- 3 Knob
- 4 Operating Mechanism
- 5 Moving Contact
- 6 Lower Terminal
- 7 Bi-metal (Thermal Tripping)
- 8 Fixed Contact
- 9 Plastic Plate
- 10 Arc Chute
- 11 Thermoplastic Base

DIMENSIONS (in mm)









## ITEM CODE & DESCRIPTION

CODE	ITEM DESCRIPTION
SINGLE POLE "B"	CURVE
98101	UNO SERIES B 06A SP MCB
98102	UNO SERIES B 10A SP MCB
98103	UNO SERIES B 16A SP MCB
98104	UNO SERIES B 20A SP MCB
98105	UNO SERIES B 25A SP MCB
98106	UNO SERIES B 32A SP MCB

CODE	ITEM DESCRIPTION
THREE POLE "C" CUF	RVE
98025	UNO SERIES C 06A TP MCB
98026	UNO SERIES C 10A TP MCB
98027	UNO SERIES C 16A TP MCB
98028	UNO SERIES C 20A TP MCB
98029	UNO SERIES C 25A TP MCB
98030	UNO SERIES C 32A TP MCB
98031	UNO SERIES C 40A TP MCB
98032	UNO SERIES C 63A TP MCB

SINGLE POLE "C" CURVE	
98001	UNO SERIES C 06A SP MCB
98002	UNO SERIES C 10A SP MCB
98003	UNO SERIES C 16A SP MCB
98004	UNO SERIES C 20A SP MCB
98005	UNO SERIES C 25A SP MCB
98006	UNO SERIES C 32A SP MCB
98007	UNO SERIES C 40A SP MCB
98008	UNO SERIES C 63A SP MCB

THREE POLE NEUT	RAL "C" CURVE
98033	UNO SERIES C 06A TPN MCB
98034	UNO SERIES C 10A TPN MCB
98035	UNO SERIES C 16A TPN MCB
98036	UNO SERIES C 20A TPN MCB
98037	UNO SERIES C 25A TPN MCB
98038	UNO SERIES C 32A TNP MCB
98039	UNO SERIES C 40A TPN MCB
98040	UNO SERIES C 63A TPN MCB

SINGLE POLE NEUT	RAL "C" CURVE
98009	UNO SERIES C 06A SPN MCB
98010	UNO SERIES C 10A SPN MCB
98011	UNO SERIES C 16A SPN MCB
98012	UNO SERIES C 20A SPN MCB
98013	UNO SERIES C 25A SPN MCB
98014	UNO SERIES C 32A SPN MCB
98015	UNO SERIES C 40A SPN MCB
98016	UNO SERIES C 63A SPN MCB

FOUR POLE "C" CURV	/E
98041	UNO SERIES C 06A FP MCB
98042	UNO SERIES C 10A FP MCB
98043	UNO SERIES C 16A FP MCB
98044	UNO SERIES C 20A FP MCB
98045	UNO SERIES C 25A FP MCB
98046	UNO SERIES C 32A FP MCB
98047	UNO SERIES C 40A FP MCB
98048	UNO SERIES C 63A FP MCB

DOUBLE POLE '	'C" CURVE
98017	UNO SERIES C 06A DP MCB
98018	UNO SERIES C 10A DP MCB
98019	UNO SERIES C 16A DP MCB
98020	UNO SERIES C 20A DP MCB
98021	UNO SERIES C 25A DP MCB
98022	UNO SERIES C 32A DP MCB
98023	UNO SERIES C 40A DP MCB
98024	UNO SERIES C 63A DP MCB



## **ISOLATOR**

UNO Isolators are perfect companions for ensuring the complete de-energisation of the electrical circuits of residences, commercial premises and adhere to the IS/IEC 60947-3 norms. These are equipped with Silver alloy contacts for weld-free operations and form the perfect fitments as incomers for individual residences.

The Isolator is a switch disconnector with independent manual operation, capable of making, carrying and breaking the current under normal conditions which may include operation under overload condition.



## TECHNICAL SPECIFICATIONS

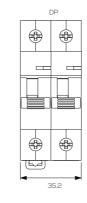
Sr. No.	FEATURES	UNO ISOLATOR
1	Conformity Standard	IS/IEC 60947-3
2	Poles	SP, DP, TP & FP
3	Current Rating (In)	40A, 63A, 100A & 125A
4	Rated Voltage (Ue)	240/415V~ AC
5	Rated Frequency(f)	50 Hz
6	Rated Insulation Voltage(Ui)	660 V
7	Rated Impulse Voltage (Uimp)	4 kV
8	Electrical/Mechanical Operation	20000 operations
9	Operating Temperature	-5 to 50°C
10	Terminal Capacity	35 mm2 (max.) copper and 50 mm2 for 100A & 125A
11	Relative Humidity	95%
12	Vibration	3 g
13	Protection Class	IP20
14	Contact Position Indication	Yes
15	Termination	Bi-connect (bus bar/cable), <= 63A, Cable =>63A
16	Design	Double break contact design
17	Mounting	Clip on Din rail (35 mm * 7.5 mm)
18	Installation Position	Vertical / Horizontal
19	Case and cover Material	Moulded, Flame Retardant Plastic
20	Utilization Category	AC 22A

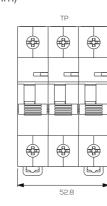
#### Salient Features

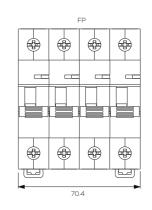
- Low Watt Loss
- Complete range in same frame
- · Clear ON-OFF Indication for the complete range
- Bi-connect Terminals offer flexibility to operate either with Bus bar or cable connection
- · Utilization category AC22A
- · Longer Electrical and Mechanical life
- Low Power Consumption, thus cost effective and energy saving

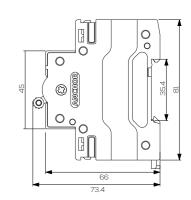


## DIMENSIONS (in mm)









CODE	ITEM DESCRIPTION	CODE ITEM	ITEM DESCRIPTION
	DOUBLE POLE ISOLATOR		THREE POLE ISOLATOR
98055	UNO SERIES 40A DP ISOLATOR	98059	UNO SERIES 40A TP ISOLATOR
98056	UNO SERIES 63A DP ISOLATOR	98060	UNO SERIES 63A TP ISOLATOR
98095	UNO SERIES 100A DP ISOLATOR	98097	UNO SERIES 100A TP ISOLATOR
98096	UNO SERIES 125A DP ISOLATOR	98098	UNO SERIES 125A TP ISOLATOR
	FOUR POLE ISOLATOR		
98063	UNO SERIES 40A FP ISOLATOR		
98064	UNO SERIES 63A FP ISOLATOR		
98099	UNO SERIES 100A FP ISOLATOR		
98100	UNO SERIES 125A FP ISOLATOR		

●● 86 87 **●●** 



## **CHANGEOVER SWITCH (COS)**

MCB Changeover Switch (Two way centre off)

UNO MCB Changeover Switch is a manual operated changeover switch which finds its application in switching load between two power supplies.

UNO MCB Changeover switch finds wide applications in industries as well as in domestic area specially in Individual Bungalow(IB) for use in low voltage distribution circuits. Changeover switches are used to shift from one source of supply to another source and vice versa. The changeover switch comes in 2P and 4P versions, for single and three phase application respectively. It has three positions (I-O-II) with centre-off. They are switch disconnectors with independent manual operation, capable of making, carrying and breaking currents under normal circuit conditions.

## UNO MCB at a glance

- · Double break contact mechanism
- Single frame for complete range
- Three position indication (I-O-II) with Red and Green Indicators
- · Centre position OFF.
- · Maximum terminal capacity of 35sq. mm
- Easy snap on DIN Rail mounting

# INDIA'S FIRST DUAL INDICATION WITH REGISTERED DESIGN



#### TECHNICAL SPECIFICATIONS

SR. NO.	FEATURES	UNO MCB Changeover Switch
1	Reference Standard	IS/IEC 60947-3
2	No. of Poles	DP & FP
3	Current Rating (In)	25A, 40A & 63A
4	Rated Voltage (Ue)	240/415V~ AC
5	Rated Frequency	50Hz
6	Rated Insulation voltage	660V
7	Rated impulse voltage	4kV
8	Dielectric Strength	2.5kV
9	Utilisation Category	AC22A
10	Protection	IP20
11	Ambient temperature	-5o to 50oC
12	Mounting	Clip on Din rail (35mm * 7.5mm) Vertical

#### INSTALLATION

- · Switch OFF MCB to disconnect power supply.
- Mount MCO in vertical position over DIN rail with snap at bottom
- · Check operation of knob position before connecting cables

#### • When Knob position is I

Top indicator RED, Bottom Indication GREEN Load is connected through power supply I

#### When Knob position is II

Top indicator GREEN, Bottom Indication RED Load is connected through power supply II

#### • When Knob is at MID position

Both indicators show GREEN & it is NO LOAD/ OFF position

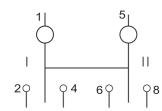
- · Connect cables at incoming & outgoing
- $\boldsymbol{\cdot} \, \mathsf{Select} \, \mathsf{power} \, \mathsf{supply} \, (\mathsf{I} \, \mathsf{or} \, \mathsf{II}) \, \mathsf{for} \, \mathsf{Load}$
- · Switch ON MCB







#### TWO POLE (DP)



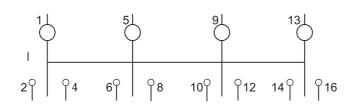
"I" Incoming terminals (main supply I)

2&6 "II" Incoming terminals (standby supply II) 4&8

Outgoing terminals (to load) 1&5

O NO Load/ OFF position

#### FOUR POLE (FP)



"I" Incoming terminals (main supply I) 2, 6, 10 & 14

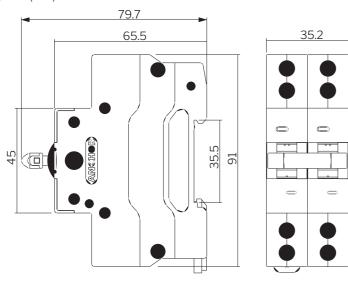
"II" Incoming terminals (standby supply II) 4, 8, 12 & 16

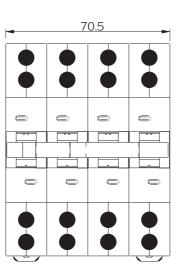
Outgoing terminals (to load) 1, 5, 9 & 13

O NO Load/ OFF position

#### DIMENSION IN (mm)

90





CODE	ITEM DESCRIPTION	CODE	ITEM DESCRIPTION
	DOUBLE POLE COS		FOUR POLE COS
98081	UNO SERIES 25A DP COS	98085	UNO SERIES 25A FP COS
98082	UNO SERIES 32A DP COS	98086	UNO SERIES 32A FP COS
98083	UNO SERIES 40A DP COS	98087	UNO SERIES 40A FP COS
98084	UNO SERIES 63A DP COS	98088	UNO SERIES 63A FP COS

## **RESIDUAL CURRENT OPERATED CIRCUIT BREAKER (RCCB)**



Residual Current Circuit Breaker (RCCB) also called Earth Leakage Circuit Breaker (ELCB) is a device designed to disconnect the load from the supply mains when the residual current ( $I\Delta n$ ) is flowing in the circuit.

The flow of currents in the electrical system is risky. Low-quality faulty wires, poorly insulated equipment or incorrect use of electrical devices cause current to flow through the wrong path to the earth. This current is called

#### **Features**

- · Elegant appearance
- · Advance Neutral breaks after phases, ensuring complete discharge
- No nuisance tripping
- Fastest Tripping Mechanism
- Bi-connect terminals for bus bar as well as cable connections
- IP 20 protection finger touch proof connection terminals as well
- · Truly current operated, operates even at very low voltage
- · High short current withstand capacity
- · Large terminal size 35 sq mm
- · Manufactured in accordance with IS 12640 Part I
- Flame retardant body and cover does not melt/drip even at high temperature



## TECHNICAL SPECIFICATIONS

FEATURES	UNO MCB
Reference Standard	IS 12640 -1:2000, IEC 61008
Poles	DP & FP
Current Rating (In)	25A, 40A & 63A
Rated Voltage (Ue)	240/415V~ AC
Rated Residual Operating Current (I∆n)	30mA, 100mA & 300mA
Protection	Against Earth fault / Leakage Current
Operating Device	Current operating device
Rated Frequency (f)	50 Hz
Rated Insulation Voltage (Ui)	440 V
Rated Conditional Short Circuit Current (Inc)	6 kA
Rated Making Capacity (I∆m)	500A or 10In whichever is greater
Operating Characteristic	'AC' Type
Dielectric Strength	2.5 kV
Trip Time	Instantaneous <40ms, Selective > 150ms
Operating Temperature	-5° to 50° C
Terminal Capacity	35mm2 (max.) copper
Relative Humidity	95%
Vibration	3g
Protection Class	IP20
Contact Position Indication	Yes
Installation Position	Vertical / Horizontal
Mounting	Clip on Din rail (35 mm * 7.5 mm)



## THE HUMAN BODY HAS KNOWN LIMITS

- Under Normal Dry Conditions, Voltage Limit = 50V AC
- Under Damp Surrounding, Voltage Limit = 25V AC

## Sensitivity Application Selection Criteron of RCCB

	RCCB	APPLICATION
Sensitivity	30mA	Protection against Direct Current contact with human body
Selection	100mA	Protection against Direct and Indirect Current contact with hum an body
Criteria	300mA	Preventing Building Fire Hazards and Direct Contact with human body

## UNO RCCB Trip Band on Different Current Value:

Rating (mA)	Not Trip Band (mA)	Trip Band (mA)	UNO RCCB Trip Band (mA)
30	15	30	18-27
100	50	100	60-90
300	150	300	180-270

## Hazards of Leakage Current Effects

- · Damage to Electrical Wiring
- Damage to Electrical Equipments
- Damage to property
- · Damage to Life
- · Electrocution

CODE	ITEM DESCRIPTION	CODE	ITEM DESCRIPTION
	DOUBLE POLE RCCB		FOUR POLE RCCB
98201	UNO SERIES 25A DP 30 mA RCCB	98213	UNO SERIES 25A FP 30mA RCCB
98202	UNO SERIES 25A DP 100mA RCCB	98214	UNO SERIES 25A FP 100mA RCCB
98203	UNO SERIES 25A DP 300mA RCCB	98215	UNO SERIES 25A FP 300mA RCCB
98207	UNO SERIES 40A DP 30mA RCCB	98219	UNO SERIES 40A FP 30mA RCCB
98208	UNO SERIES 40A DP 100mA RCCB	98220	UNO SERIES 40A FP 100mA RCCB
98209	UNO SERIES 40A DP 300mA RCCB	98221	UNO SERIES 40A FP 300mA RCCB
98210	UNO SERIES 63A DP 30mA RCCB	98222	UNO SERIES 63A FP 30mA RCCB
98211	UNO SERIES 63A DP 100mA RCCB	98223	UNO SERIES 63A FP 100mA RCCB
98212	UNO SERIES 63A DP 300mA RCCB	98224	UNO SERIES 63 A FP 300mA RCCB

●● 92



## **UNO RCBO**

Residual Current Circuit Breaker with Over Current Protection (RCBO) is a combination of MCB and RCCB, commonly used in applications where there is a need to combine protection against Overcurrent (Overload and Short-circuit) and protection against Earth Leakage currents. RCBOs help in sensing this kind of faults and trip the circuit ensuring complete protection of the human and connected equipment.

#### TECHNICAL FEATURES

- Rated Short Circuit Breaking Capacity 10000A
- Mid Trip Indication
- Contact Position Indicator
- ISI Marking
- IP20 Protection





2 Pole (1P +N) (4 Module)

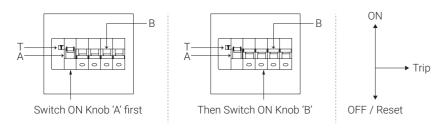
4Pole (3P+N) (6 Module)

#### To Switch ON the RCBO

RCBO is switched ON; and both Knob A and Knob B are at ON position:

Three conditions of faults can be determined with knob positions.

- a. After Over Load Tripping: Knob A remains at ON position, while Knob B drops at Mid position
- b. After Short-circuit Tripping: Knob A remains at ON position while knob B drops to Mid position
- c. After Earth Fault Tripping: Knob A drops to OFF position and Knob B drops to Mid position



#### Fault Findings When RCBO Trips

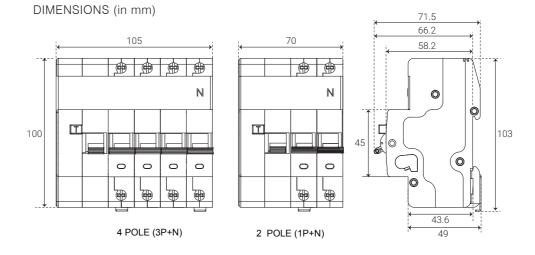
- 1. Switch OFF all the switches/MCBs connected in circuit downstream with RCBO
- 2. Switch ON RCBO and simultaneously switch ON the switches one by one.
- 3. You will find during switching ON of particular appliance /switch ON, RCBO trips again and again. This shows that this is a faulty circuit/appliance.
- 4. Mid Trip indication on MCB (knob B) will appears when RCBO Trips due to any electrical fault like Overload, Short circuit, Earth fault.
- 5. Isolate the faulty circuit, rectify the fault and switch ON the RCBO. To switch ON RCBO again, RESET knob B of MCB first and then switch ON knob A followed by switching ON Knob B of MCB.

#### **APPLICATION**

- Triple protection in a single device
- Over load
- Short circuit
- Earth fault
- Suitable for domestic & residential applications
- Application on both lighting & motor loads

## TECHNICAL SPECIFICATIONS

SR. NO.	FEATURES	UNO MINI MCB
1	Туре	AC applications
2	Standard	IS 12640-2, IEC 61009-1
3	Current rating	6A, 10A, 16A, 20A, 25A, 32A, 40A, 63A
4	Current sensitivity	30mA, 100mA, 300mA
5	No. of poles	2 Pole (1P +N), 4Pole (3P+N)
6	Rated voltage	240V~, 415V~
7	Fault type	Type AC
8	Terminal capacity	35 sq.mm
9	Electrical operations	4000
10	Mechanical operations	10000
11	Operating temperature	-5 to 40°C



● ● 94 95 **●** ●



## **UNO MINI - MODULAR MCB**

Mini-modular MCBs can be snapped fit on modular plates to incorporate the latest developments in the manufacturing technology as well as that of circuit protection for various applications.

The UNO Mini-modular MCB is designed to protect household appliances from electrical overload and short-circuit. It offers continuing protection and thus prolongs the life of gadgets. Aesthetically designed with a fire-retardant body, it fits snugly into the modular switch-plates, making installation user-friendly as well as economical by avoiding the cost of a separate board.





## Features

- Protects against over load and short-circuit
- High breaking capacity of 3000A
- Low watt loss and energy saving
- Can be snapped fit on modular plates and can be screw mounted
- Can be used for per point protection
- Ideal for being used in Single phase Distribution Circuit
- Available as Single pole or Double pole versions in ratings fro m 6A to 32A
- Compact and trendy Designs and latest Technology
- All live metal parts are covered with non-inflammable thermosta t material
- Longer Electrical and Mechanical life
- Finger-proof terminals offering IP20 degree of protection

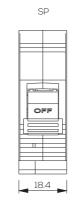
## **Applications**

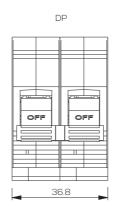
- Residential: AC, Refrigerators, Geyser, Washing Machine, Home Theater, Domestic Pump Set, Oven cum griller, Cooking Range, Single Phase Motor etc.
- Commercial: AC, Hot plate, Xerox machines
- Hospitality: AC's, Heaters, Heavy duty mixer-grinders, Coolers
- Health care: Low-watt X-ray machines, Laboratory equipments etc. in individual clinics

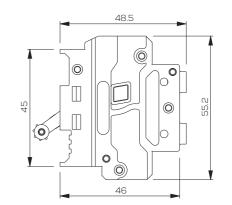
#### TECHNICAL SPECIFICATIONS

SR. NO.	FEATURES	UNO MINI MCB
1	Applicable standard	IS/IEC 60898-1:2002
2	Standard Rated Current (In)	6A to 32A
3	Tripping Characteristics	C curve
4	Poles	SP and DP
5	Rated short circuit breaking capacity (Icn)	3000A (3kA)
6	Rated Voltage (Un)	240V~ AC
7	Rated Frequency (f)	50 Hz
8	Ambient working temperature	-5 to 50°C
9	Rated Insulation Voltage (Ui)	660V
10	Rated Impulse Voltage (Uimp)	4kV
11	Dielectric Strength	2.5kV
12	Terminal Capacity	10 sq.mm (max.) copper
13	Relative Humidity	95%
14	Vibration	3 g
15	Endurance (Mechanical)	20000 operations
16	Endurance (Electrical)	20000 (In <16A) 5000 (In>16A)
17	Case and cover material	Moulded, Flame retardant plastic
18	Switching mechanism	Manual & Trip-free mechanism
19	Tripping mechanism	Thermal-magnetic
20	Installation position	Vertical/horizontal
21	Wattage Loss	Much Lower than the values in IS Standard
22	Knob padlocking	Yes
23	Termination	Cable
24	Mounting	Snap fit/Screw mounted (on board)
25	Protection class	IP20
26	Suitable for protection	Per point protection
27	Design Registration certificate	Registered, Design Registration Number: 252904

## DIMENSIONS (in mm)







●● 96 97 ●●



## **DISTRIBUTION BOARDS**

## UNO DISTRIBUTION BOARDS

UNO Distribution boards have been designed to provide a new dimension of protection in Homes, Offices and Industries. It is equipped with stylish color, elegant curves and distinctive finish that blends with all kinds of interior décor.

UNO Distribution Boards thus offer dual benefits of Flexibility and Safety, enabling safe and efficient distribution of electrical power.

These boards undergo a seven-tank phosphating pre-treatment process to ensure anti-rust conditioning, superior finish and lasting strength. Post this process, premium quality powder coating is applied using state-of-the-art techniques. These boards are also equipped with top and bottom removable gland plates with a number of knockouts. One can thus install them either flush or wall mounted.

PRODUCTS	I/C CURRENT RATING	INCOMER	SUB INCOMER	OUTGOING	EARTHING TERMINAL	SHROUDED NEUTRAL LINK
SPN DB	Up to 63A	SPN/DP	-	SP MCB	1	1
TPN DB	Up to 63A	TP/TPN/FP	-	SP MCB	1	1
Vertical TPN DB	Up to 63A	TP/TPN/FP	-	SP & TP MCB	1	1
PPI DB	Up to 63A	TP/ TPN/ FP	DP / MCB/ RCCB	SP MCB	3	3
Phase Selector DB	Up to 63A	TP/ TPN/ FP	FP / MCB/ RCCB	SP MCB	1	1
Fight Segment DR	Unito 63A	TP/TPN/FP	DP / MCB/ RCCB	SP MCB	4	4







## **FEATURES OF UNO DISTRIBUTION BOARD**



#### Reversible Door

By simply shifting the hinge assembly from left to right the opening of the door can be interchanged depending on the location of the installation.



#### Pan Assembly

This concept facilitates detaching of the Chassies from the DB and the required wiring for the circuit protection device can be done at a comfortable location.



#### **Dust Guard**

The Cement spill protector prevents entry of dust or cement particles inside the DB during the construction period at site. The installation guidelines are mentioned elaborately on cement spill protector.



## Door Earthing

Door earthing makes the entire UNO DB totally shock proof.



#### Integrated Frame Design

UNO DB has a unique feature of the frame integrated into the box.



#### **Front Door Aesthetics**

The aesthetically designed front facia of the DB adds an alluring dimension to the living space



#### Internal Sliding Knob/Latch

Aesthetically Appealing curved 2 pieces grey coloured auto locking latch.



#### Insulated copper Bus Bar

All UNO DBs have this facility for quick and easy installation for 100A rating.



## IP - 43 Protection

Offers added Protection from solid and water fall at  $60^{\circ}$  from verticals.



#### Ample space for wiring

Ample space for wiring is provided to ensure proper distribution of neutral and earth wires.



#### Visual Anti-inserting facility

Aids in identifying the box inserting level in the wall.



## Circuit lable diagram

Circuit lable diagram is provided to avoid any mismatch during wiring



#### Front Plate Studs

Front plate studs are provided for easy lifting of front plate.



#### Identified wire set

All UNO DBs are equipped with wire set for better device management.



## Double mounting key holes

Every UNO DB is provided with key holes for flush as well as surface mounting.



#### **Shrouded Neutral Bar**

Shrouded Neutral bars facilitate safety of installation and human life.



#### Installation Manual Sheet

UNO DB comes with installation manual sheet for safe and easy installation of the circuit breakers.



## Identification level and Blank Plate

Identification level and blank plates are provided for the circuit.



#### Side Locking DIN Bar

Stoppers are provided at the corner of the DIN bar for avoiding slippage of device.



#### Door & Shield Independent

During maintenance jobs, one can just remove the shield without removing the entire DB.



## **Embossed Earthing Identification**

Clear earthing marking for ease of installation.

Screw: UNO DB is equipped with stainless steel screws that prevent rusting of the surface.



# Detachable Gland Plates with different size of knockouts

Removable Gland plates at the top and bottom of the DB facilitate easy entry and exit of the cables. Thus one can remove the entire plate from incoming and outgoing terminals.

●● 100 101 ●●



## **SPN DOUBLE DOOR DISTRIBUTION BOARD**







#### DB TECHNICAL SPECIFICATIONS

No. of Ways	6, 8, 12 & 16 ways
Incoming	Max.63A
Outgoing	Max. Individual 63A
Voltage Rating	240V~ Single Phase
Incoming Options	SPN / DP MCB / RCCB / Isolator
Outgoing Options	Single pole MCB up to 63A

## TPN DOUBLE DOOR DISTRIBUTION BOARD







## DB TECHNICAL SPECIFICATIONS

No. of Ways	4, 6, 8 & 12 ways
Incoming	Max. 63A
Outgoing	Max. Individual 63A
Provision for Incomer slots	8 Slots
Voltage Rating	240/415V~ AC, 3 Phase / 4 Wire
Incoming Options	Three phase MCB / RCCB / Isolator
Outgoing Options	Single pole MCB up to 63A

## **TPN VERTICAL DISTRIBUTION BOARD**







#### DB TECHNICAL SPECIFICATIONS

No. of Ways	4, 6, 8, & 12 ways
Incoming	Max. 63A
Outgoing	Max. Individual 63A SP & TP
Provision for Incomer slots	8 Slots
Voltage Rating	240/415V~ AC, 3 Phase/4 Wire
Main Incoming Options	Three Phase MCB or RCCB or ISOLATOR
Outgoing Options	SP or TP or Both MCB

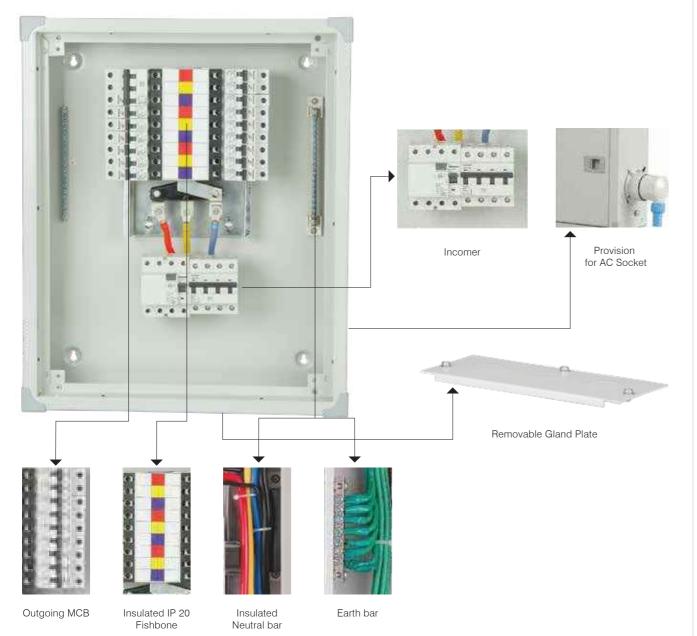




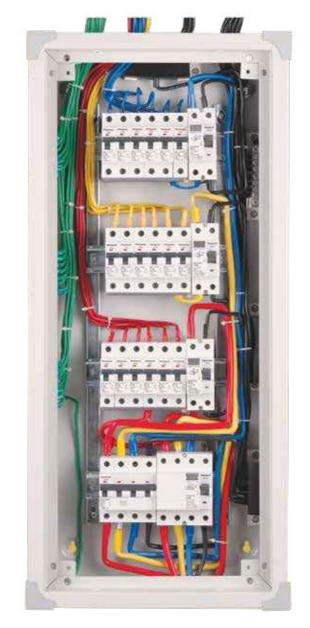
## SPECIAL PURPOSE DISTRIBUTION BOARD

#### **Salient Features of Vertical DB**

- · Adheres to IS13032 & 8623 (Part 3) Norms
- Universal mounting DB supplied with copper insulated bus bar neutral link, earth link, earthing studs and connection wires
- Equipped with detachable Gland plates with knock outs on both sides
- Suitable for TP / TPN / FP as an incomer with 8 slots followed by SP / TP MCB as an outgoing
- Bus bar Rating 100A
- Flexible for Single Phase / Three Phase outgoing



# PER PHASE ISOLATION (PPI) VERTICAL WITH WIRING DIAGRAM









## DB TECHNICAL SPECIFICATIONS

No. of Ways	2+4, 2+6, 2+8 & 2+12 Ways
Incoming	Max.63A
Outgoing	Max. Individual 63A
Provision for Incomer slots	8 Slots
Voltage Rating	240/415V~ AC, 3 Phase/4 Wire
Main Incoming Options	Three Phase - MCB or RCCB or ISOLATOR
Sub Incoming Options	DP MCB / RCCB

● ● 104 105 ● ●



## PHASE SELECTOR (VERTICAL) DISTRIBUTION BOARD







## DB TECHNICAL SPECIFICATIONS

No. of Ways	4, 6, 8 & 12 ways
Rotary Switch Rating	40A & 63A
Incoming	Max. 63A
Outgoing	Max. Individual 63A
Provision for Incomer slots	8 Slots
Voltage Rating	240/415V~ AC, 3 Phase/4 Wire
Incoming Options	Three Phase MCB / RCCB / Isolator.
Rotary Switch with Indicators	Three Selectors with Three R, Y, B Indicating Lights Switch

## **EIGHT SEGMENT DISTRIBUTION BOARD**







## DB TECHNICAL SPECIFICATIONS

No. of Ways	4, 6, 8 & 12 ways
Incoming	Max. 63A
Outgoing	Max. Individual 63A
Provision for Incomer slots	8 Slots
Voltage Rating	240/415V~ AC, 3 Phase/4 Wire
Main Incoming Options	Three Phase - MCB or RCCB or ISOLATOR
Sub Incoming Options	DP MCB / RCCB

## **PRODUCT CODES - NEW RANGE**

JNO SERIES	ITEM DESCRIPTION	CODE ITEM	ITEM DESCRIPTION
	PER PHASE ISOLATION TPN DD DB		PER WIRE TPN DOUBLE DOOR DB
98337	4+2 WAY HORIZONTAL PPI UNO DB	98471	4 WAY TPN PREWIRE DD UNO DB (8+12)
98338	6+2 WAY HORIZONTAL PPI UNO DB	98472	6 WAY TPN PREWIRE DD UNO DB (8+18)
98339	8+2 WAY HORIZONTAL PPI UNO DB	98473	6 WAY TPN PREWIRE DD UNO DB (8+24)
		98474	12 WAY TPN PREWIRE DD UNO DB (8+36)
	PHASE SELECTOR TPN DD DB		FLEXI TIER DB
98451	4 WAY 40A.P.S. HORIZONTAL UNO DB	98345	14 MOD 2 ROW UNO DB (28 MODULE)
98452	4 WAY 63A.P.S. HORIZONTAL UNO DB	98346	14 MOD 3 ROW UNO DB (42 MODULE)
98453	6 WAY 40A.P.S. HORIZONTAL UNO DB	98347	14 MOD 4 ROW UNO DB (56 MODULE)
98454	6 WAY 63A.P.S. HORIZONTAL UNO DB		TV & TEL. SPN DOUBLE DOOR DB
98455	6 WAY 40A.P.S. HORIZONTAL UNO DB	98352	6 WAY SPN TV & TEL UNO DB
98456	8 WAY 63A.P.S. HORIZONTAL UNO DB	98353	8 WAY SPN TV & TEL UNO DB
98457	12 WAY 40A.P.S. HORIZONTAL UNO DB	98355	12 WAY SPN TV & TEL UNO DB
98458	12 WAY 63A.P.S. HORIZONTAL UNO DB	98356	16 WAY SPN TV & TEL UNO DB
	PREWIRE SPN DOUBLE DOOR DB		TV & TEL TPN DOUBLE DOOR DB
98461	6 WAY SPN PREWIRE DD UNO DB (2+6)	98360	4 WAY TPN TV & TEL UNO DB
98462	8 WAY SPN PREWIRE DD UNO DB (2+8)	98361	6 WAY TPN TV & TEL UNO DB
98463	10 WAY SPN PREWIRE DD UNO DB (2+10)	98362	8 WAY TPN TV & TEL UNO DB
98464	12 WAY SPN PREWIRE DD UNO DB (2+12)		
98465	16 WAY SPN PREWIRE DD UNO DB (2+16)		





●● 106 107 ●●



## **MCB ENCLOSURE - SHEET STEEL**





## **UNO AC BOX**

Protecting the air-conditioning and offering steady ventilation for your dream space is at the heart of UNO AC Boxes. They are available as Non-Modular Metal AC Boxes and Modular AC Boxes. Aesthetic and sleek looks make them the ideal companions for your home, office or cabin air-conditioners.

## POWER UNIT (Modular Box with MINI MCB)

#### **Features**

- 16A ISI Marked tested upto 20A unbreakable heavy duty plug top
- Suitable for per point protection of home appliances
- Compact and Aesthetic Design
- Offers Overload and Short Circuit Protection
- Easy to operate and replace
- Completely Insulated Design



Code	Description
98488	3 Module Modular AC Box 20A SP MCB with Plastic Enclosure & Plug Top
98489	3 Module Modular Surface AC Box 20A SP MCB & Plug Top without Enclosure
98491	4 Module Modular AC Box 20A SP MCB with Metal Enclosure & Plug Top
98492	4 Module Modular AC Box 20A DP MCB with Metal Enclosure & Plug Top
98496	3 Module Modular AC Box 25A SP MCB with Plastic Enclosure & Plug Top
98497	3 Module Modular AC Box 25A SP MCB with Plug Top without Enclosure
98498	4 Module Modular AC Box 25A SP MCB with Metal Enclosure & Plug Top
98499	4 Module Modular AC Box 25A SP MCB with Plug Top without Enclosure

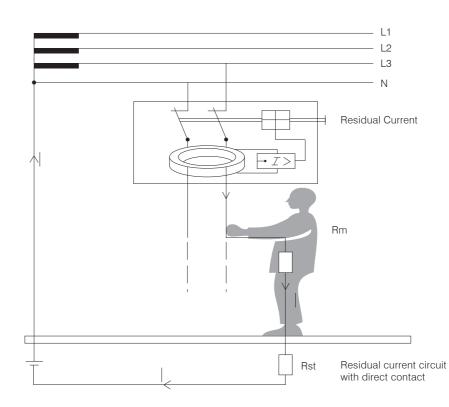
# PROTECTION AGAINST DIRECT & INDIRECT CURRENT

## **Protection against Direct Contact**

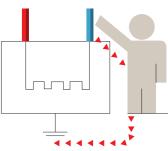
Accidental contact with live parts of electric appliances cause earth leakage current to flow through the human body resulting in shocks that may be fatal. RCCB trips immediately under these circumstances and saves human lives. For e.g. when someone makes contact with a live electrical component of a device, touches a live bus bar in the distribution panel or unprotected test cables or when a person sticks a metal object into a power socket or touches a live cable.

## **Protection against Indirect Contact**

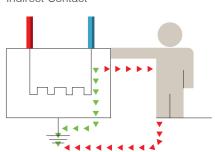
The metal enclosures of electric appliances can become live and cause an electric shock to unwary persons touching them during an internal fault or insulation failure. RCCB trips instantaneously and thus remove the possible risk from dangerous indirect contact. Indirect contacts are independent of humans, such as a person touching an electric metal frame. This is when a person makes contact with a metal earthed part which has accidentally been powered up following an insulation fault. These type of contacts are very dangerous.



Direct Contact



Indirect Contact



●● 108 109 ●●







## **BO MCCB**

Moulded Case Circuit Breakers (MCCB) are electromechanical devices which find application in protecting electrical circuit from over load and short circuit currents. MCCB is designed in compliance with IS/IEC 60947-2 with Thermal and Magnetic tripping element for circuit protection.

- · Adjustable Thermal Fixed Magnetic
- Compact Frame
- · Suitable for Isolation
- · 100% Neutral Protection
- Trip Free Mechanism
- · Utilization Category A
- · 3P&4P
- Ics = Icu =100%
- Icu =10kA



## TECHNICAL SPECIFICATIONS

FEATURES	Uno BO MCCB
Standard	IS/IEC 60947-2
Product Range	upto 125A
Poles	3,4
Frame Sizes	125AF
Rated Ultimate Short Circuit Breaking Capacity, Icu (max)	10kA
Rated Service Short Circuit Breaking Capacity, Ics	100% Icu
Rated Operational Voltage Ue (V)	415V AC
Rated Frequency (Hz)	50/60Hz
Rated Insulation Voltage Ui (V)	800V
Rated Impulse Withstand	6kV
Voltage Uimp (KV)	
Line Load Bias	Yes
Utilization Category	A
Suitability for Isolation	Yes
Release Available	Adjustable Thermal
	(0.8-1.0In), Fixed Magnetic
Mechanical Operations	15000
Electrical Operations	3000
Calibration Temperature	40°C

● 110 111 ● ●



## **B1 MCCB**

Moulded Case Circuit Breakers (MCCB) are electromechanical devices which find application in protecting electrical circuit from over load and short circuit currents. MCCB is designed in compliance with IS/IEC 60947-2 with Thermal and Magnetic tripping element for circuit protection.

- · Quick Make & Quick Break Mechanism
- · Line Load Reversible
- · Suitable for Isolation
- · Utilization Category A
- Fixed Thermal Magnetic
- · Trip Free Mechanism
- · 3P&4P
- Ics = 75% Icu
- Icu =10kA





## TECHNICAL SPECIFICATIONS

FEATURES	Uno B1 MCCB
Standard	IEC 60947 Part 2
Product Range	upto 125A
Poles	3,4
Frame Size	125AF
Rated Ultimate Short Circuit Breaking Capacity, Icu (max)	10kA
Rated Service Short Circuit Breaking Capacity, Ics	75% Icu
Rated Operational Voltage Ue (V)	415V AC
Rated Frequency (Hz)	50/60Hz
Rated Insulation Voltage Ui (V)	800V
Rated Impulse Withstand voltage Uimp (kV)	8kV
Line Load Reversibility	Yes
Utilization Category	A
Suitability for Isolation	Yes
Release Available	Fixed
Mechanical Operations	10000
Electrical Operations	3000
Calibration Temperature	40°C

## **ENCLOSURE BO/B1 MCCB**

Uno MCCB enclosure can be used with B0 & B1 MCCB for three phase application.

It has wide application in building, commercial & industrial application. Used as a flush & surface mounted with IP 30 degree protection. MCCB enclosure has many no. of detachable gland plate in different size for incoming & outgoing connection.

- · Suitable for Flush and Surface Mounting
- · RAL 7035 Semi Glossy Finish
- · IP30 Protection
- · Level Marking to the Installation
- Neutral Block for Termination of Neutral Wire





B0 MCCB Enclosure

B1 MCCB Enclosure

## TECHNICAL SPECIFICATIONS

FEATURES	Uno Enclosure BO/B1 MCCB
Standard	IS 8623-3 /IS 13032
No of Poles	3P & 4P
Protection	IP30
Color	RAL 7035 Semi Glossy
Mounting	Flush and Surface Mounting
Dimensions (LxWxH) mm	325x215x90
Box Sheet thickness	1.2 mm
Box Insertion (Level) marks	Available
Detachable Gland Plate	Available
Side lock for Din Rail Channel	Available

•• 112 113 ••



## **VTPN DISTRIBUTION BOARD - B1 MCCB**

Vertical three phase neutral distribution board (VTPN DB) for incomer MCCB is used for commercial & industrial application. In this DB busbar chambers are already fitted with the distribution board.

Uno VTPN DB is a double door DB which is IP 43 degree protection. In this Uno VTPN DB incomer is used as a MCCB incomer either three pole or fore pole in same DB followed by single pole or three pole or both MCB as a outgoing. This DB having very wide space for wiring.

- · Suitable for Flush and Surface Mounting
- · IP43 Protection
- Masking Sheet to Prevent Dust while Plastering
- · Level Marking to the Installation
- · RAL 7035 Semi Glossy Finish





## TECHNICAL SPECIFICATIONS

FEATURES	Uno VTPN DB - B1 MCCB
No of Ways	4, 6, 8 & 12 ways
Type of Installation	Flush/ Surface
Colour/ Finish	RAL 7035 Semi Glossy
Door Locking Options	Sliding Lock
Removable Gland Plate	Top & Bottom
Box Sheet Thickness	1.2 mm
Distribution Technique	2mm thick Copper Insulated Pan Assembly
Busbar Rating	63A
Voltage	240/415V~, 3 Phase
Main Incoming Option	B1 Frame125 Uno MCCB
Neutral Bar Termination Capacity	25 sqmm
Earthing Bar Termination Capacity	25 sqmm
Ingress Protection (IP)	IP43
Rated Insulation Voltage (Ui)	690V~
Frequency	50Hz
Dielectric Strength	2.5kV
Ambient Temperature	-5°C to 40°C
DB Reference Standard	IS 8623-3, IS 13032

## **BUSBAR DISTRIBUTION BOARD**

BUSBAR Distribution Board is designed with copper Busbar (strip), which is used to distribute the 3 phase incoming supply with multiple outgoing connections of

3 phase or 1 phase.

- · Ample Space for Wiring
- · 100% Neutral Rating
- · Step Wise Busbar Mounting
- High Insulated DMC Material Support for Busbar Assembly
- · Tin Plated ETP Copper Busbar



## TECHNICAL SPECIFICATIONS

Uno Busbar DB
IS 61439-6
RAL 7035 Semi Glossy
32A, 63A, 100A & 200A
4 Way
415 V AC
1 mm & 1.6mm
40°C
DMC
397x300x172



## **HIGHER RATING RCCB**

Residual Current Circuit Breaker(RCCB) also called an Earth leakage Circuit Breaker (ELCB) is a device, designed to cause the opening of contacts to disconnect the load from the supply mains, when the residual current (Idn) is flowing in the circuit.

The flow of currents in the electrical system are always involves risks due to Poor faulty wire, poorly insulated equipment & incorrect use of an electrical device cause current to flow through the wrong path to the earth. This current is called is "Leakage Current".

- Single Frame for Complete Range IP20 Protection
- · Robust Operating Mechanism
- · Dual Termination Capacity
- No Nuisance Tripping
- Test Button 'T' provided for Periodic Check
- · Cond. Short Circuit Current Capacity 10kA



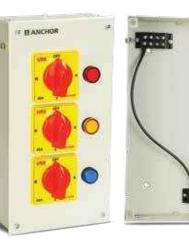
## TECHNICAL SPECIFICATIONS

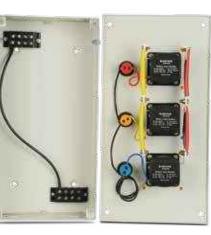
FEATURES	Uno HR RCCB
Current Rating	80A & 100A
Residual Current	30,100, 300mA
Type of Residual Current	AC
Poles	2P, 4P
Rated Voltage	240V, 415V AC
Frequency	50/60Hz
Rated Conditional Short Circuit Current	10kA
Standard	IS 12640-1/2000, IEC 61008-1
Ingress Protection	IP20
Terminal Capacity (Max.)	50 sq.mm
Dielectric Strength	2.5kV

## **ROTARY SWITCH ENCLOSURE**

It consists of three (single phase) change over switches, each connected to one of the three phases. The single phase loads are distributed over the three outgoing phase connections. It helps to fight the common problem of Phase Cut in a three phase connection having single phase loads through enclosure.

- IP40 Protection
- · Fully Insulated Internal Wiring
- · Mechanical Life of 100000 Operations
- Electrical Life of 30000 Operations
- IP20 Phase Indication Lamps





## TECHNICAL SPECIFICATIONS

FEATURES	Uno Rotary Switch Enclosure
Standard	IEC 61439-3, IEC 60947-5, IS:13032 & IS:8623
Current Range	40A & 63A
Rated Voltage (Ue)	440V AC
Rated Insulation Voltage (Ui)	500V
Rated Impulse Withstand Voltage (Uimp)	2.5kV
Frequency	50 Hz
Utilization Category	AC-23
Rated Current of Busbar	63A
Indicating Light	With Respective Phase
Rated Duty	Uninterrupted
Ingress Protection	IP40
Dimensions (LxWxH) mm	382x200x93



A sustainable and unique offering from Anchor, the UNO Plus Switchgear rings in a new dimension of security for modern spaces due to its best-in-class manufacturing processes, use of superior raw-materials and stringent quality control adding to the comfort and safety of millions of people.



## **MINIATURE CIRCUIT BREAKER (MCB)**

Engineered to deliver optimum security to the heavy electrical appliances of your home and office, the Anchor UNO Plus MCB range becomes a cherished partner of the premise. Powered by Panasonic technology, this range is designed by the finest brains of India and Japan.

These Circuit breakers secure the premise from electrical fire caused due to short circuits. Its exclusive mid-trip function makes it easy to identify circuit fault as the knob stays in centre in case of overload or short circuit. Manufactured with superior fire-resistant plastic parts, which prevent abnormal heating and offer resistance against strong impacts. The breaker offers high short circuit breaking capacity of 10000A (10kA).



#### **KEY FEATURES**

#### STATE OF THE ART DESIGN

UNO Plus MCB has state of the art design. The MCB is elegant and has ergonomically designed knob for better grip.



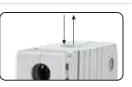
#### 10kA BREAKING CAPACITY

High speed current breaking at short circuits with energy limiting class of 3 fulfils the requirement of safety & protection from high currents in small time, milliseconds.



#### LINE LOAD REVERSIBILITY

The connections to the Line/Load supply can be made from either Top terminals / bottom terminal. The design of MCB doesn't differentiate between feeding of line current from either side.



#### UNIVERSAL TERMINALS

Connections to the MCB can be made by either cables or bus bars. Dual termination capacity provides flexibility for mounting MCB in DB.





#### NO FALL OUT OF SCREWS

Captive screws enable them to be held with the terminals, and they arrest the fall of them in MCB out of the product.



#### **VENTILATION CHANNELS**

Channels are designed at the side covers of MCB, to enhance the flow of air between adjacent poles of MCB, making it running cool and thus low watt loss.



#### KNOB PAD LOCKING

MCB can be locked either in ON or OFF position of MCB to prevent unwanted operation of the product.



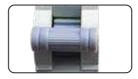
#### ON-OFF CONTACT INDICATION

GREEN indication on the position contact indicator, ensures physical opening of the contacts. RED indication shows the circuit is ON.



#### **FAULT INDICATION BY MID TRIP**

In case of occurrence of fault in the circuit, both by over load / short circuit; MCB will TRIP the circuit and the Knob will drop to centre position. In a Distribution board with large number of MCBs, this enables quick identification of faulty line for solution.



#### EASY REMOVAL FROM DIN CHANNEL

MCB can be snap fit easily on DIN channel of width 35mm. Removal of MCB from a channel of MCBs can be done conveniently without disturbing other installed devices.



#### **ENERGY-EFFICIENT**

UNO Plus MCB has lower watt loss values compared to the specification of Indian standards. Thus, it runs at a cool temperature. Due to lower wattage loss, it can effectively be termed an energy efficient.



#### TERMINATION CAPABILITY

Maximum termination capacity of connecting terminals is 35sq.mm at both Top and Bottom terminals; enabling use of aluminium conductors in DB.



## IP20 PROTECTION

UNO Plus belives in safety first. Finger-proof terminals eliminate chances of accidental contact with live parts as all of them are shrouded/inaccessible, ensuring safety of installers.



#### SAFETY SLIDING SHUTTERS

Insulating shutters ensures safety to personnel and guides the cables for termination.



#### LOAD IDENTIFICATION LABEL

Labelling of the circuit at front panel for display of load.



#### **GREEN PRODUCT**

The plastic material used is High performance engineering plastics, which meets a glow wire test of 960°C. UNO Plus MCB uses RoHS compliant environmentally friendly components. MCBs can now be recycled without creating environment pollution.



#### SUITABLE FOR ISOLATION

UNO Plus MCB guarantees complete electrical isolation of the downstream circuit when switched off, thus enhancing safety for users.

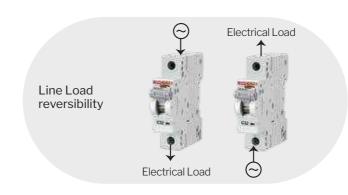


#### CERTIFICATES

UNO Plus MCB is ISI marked as per IS/IEC 60898-1: 2015. This product has CE certification. A design registration patent is also registered.



## SPECIAL KEY FEATURES





Safety Sliding

Shutters



Dual

Termination





Breathing Channels

Load Identification Label



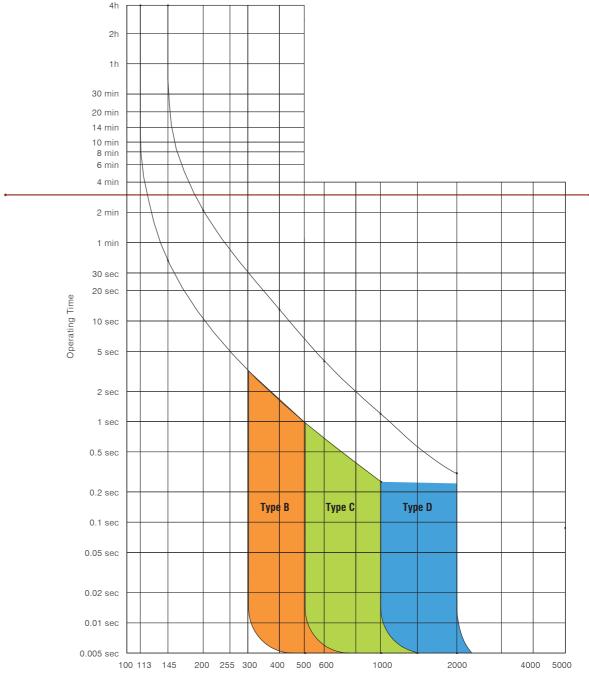
## TECHNICAL SPECIFICATIONS

Sr. No.	FEATURES	UNO PLUS MCB
1	Applicable Standard	IS/IEC 60898-1:2015
2	Rated Current (In)	0.5A to 63A
3	No. of Poles	SP, SP+N, DP, TP, TP+N, FP
4	Tripping Characteristics	B* and C
5	Rated Short Circuit Breaking Capacity (Icn)	10kA
6	Rated Voltage (Ue)	240V AC, 415V AC
7	Rated Frequency (f)	50 Hz
8	Rated Insulation Voltage(Ui)	660V
9	Rated Impulse Voltage (Uimp)	4 kV
10	Dielectric Strength	2.5 kV
11	Terminal Capacity	35 mm2 at both Line & Load
12	Protection Class	IP20
13	Switching Mechanism	Manual & Trip-free mechanism
14	Tripping Mechanism	Thermal-magnetic
15	Termination	Bi-connect (Bus bar /cable) at both Line & Load
16	Contact Position Indication (ON-OFF)	Yes
17	Mid Trip Indication	Yes
18	Knob Pad Locking	Yes
19	Safety Shutters	Yes
20	Line Load Reversible	Yes
21	Label Holder	Yes
22	RoHS Compliant	Yes

## Power Loss in Watt per Pole

IS/IEC 60898-1 (Watt)	Watt Loss per Pole at In (Watt)
3.0	1.3
3.0	1.6
3.0	0.8
3.0	1.4
3.5	2.4
4.5	2.2
4.5	2.5
6.0	3.2
7.5	3.4
13.0	6.1
	(Watt)  3.0  3.0  3.0  3.0  3.5  4.5  4.5  6.0  7.5

## Tripping Characteristics - Curve Type B, C & D



Current (% of rated current)

● ● 122 123 ● ●



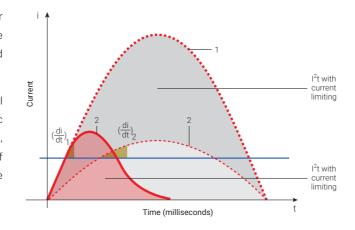
## Tripping Characteristics - Curve Type B, C & D

Sr. No.	Thermal Tripping		Magnetic Tripping			
Tripping Curve	Non-Tripping Current (A)	Tripping Current (A)	Tripping time In < = 63A	Hold Current	Trip Current	MCB Tripping Time (t)
В	1.13 ln		> 1 hour	3 In	-	t ≥ 0.1s
ь		1.45 ln	< 1 hour	-	5 In	t ≤ 0.1s
С	1.13 ln		> 1 hour	5 In	-	t ≥ 0.1s
· ·		1.45 In	<1hour	-	10 In	t ≤ 0.1s
D	1.13 In		> 1 hour	10 In	-	t ≥ 0.1s
U		1.45 In	< 1 hour	-	20 In	t ≤ 0.1s

#### Theory of Current Limiting

Current limiting when referred to a circuit breaker describes its ability to prevent passage of the maximum prospective fault current through it and permitting a limited amount to flow.

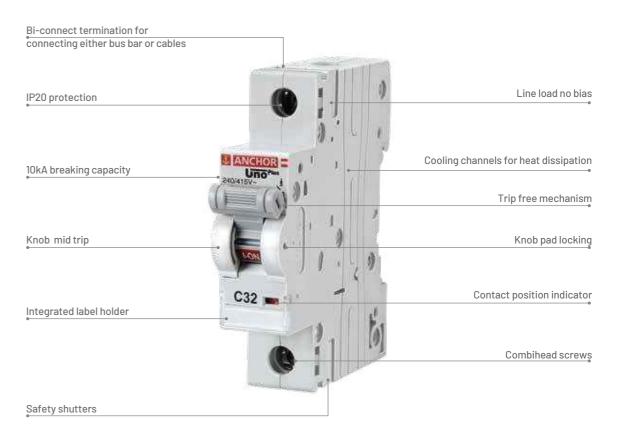
Current limitation has many benefits for electrical installations. It reduces significantly electrodynamic (mechanical) and thermal stresses on conductors, prolonging their life, and it allows for a variety of device coordination techniques to enhance the performance of downstream switchgears.



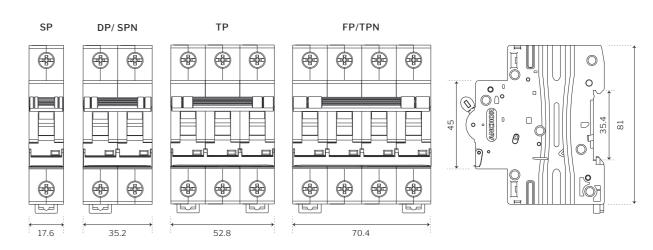
## Permission I2t (let-through) values for circuit breakers Type C with rated current up to and including 63A

Type C					
Rate Short-circuit	Class 1	Class 3			
Capacity (A)	≤ 63A	≤16A	20A, 25A, 32A	40A	50A, 63A
3000		17000	20000	24000	30000
4500	No limits specified	28000	37000	45000	55000
6000		40000	52000	63000	75000
10000		80000	100000	120000	145000

## MCB Nomenclature



## UNO Plus MCB Drawings Dimensions (in mm)



● 124 125 ● ●



## ITEM CODE & DESCRIPTION

CODE	ITEM DESCRIPTION
SINGLE POLE "C" CL	IRVE
98801	0.5A SP C UNO PLUS MCB
98802	1A SP C UNO PLUS MCB
98803	2A SP C UNO PLUS MCB
98804	3A SP C UNO PLUS MCB
98805	4A SP C UNO PLUS MCB
98806	5A SP C UNO PLUS MCB
98807	6A SP C UNO PLUS MCB
98808	10A SP C UNO PLUS MCB
98809	16A SP C UNO PLUS MCB
98810	20A SP C UNO PLUS MCB
98811	25A SP C UNO PLUS MCB
98812	32A SP C UNO PLUS MCB
98813	40A SP C UNO PLUS MCB
98814	63A SP C UNO PLUS MCB

98814	63A SPCUNOPLUSMCB
SINGLE POLE NEUT	RAL "C" CURVE
98815	0.5A SPN C UNO PLUS MCB
98816	1A SPN C UNO PLUS MCB
98817	2A SPN C UNO PLUS MCB
98818	3A SPN C UNO PLUS MCB
98819	4A SPN C UNO PLUS MCB
98820	5A SPN C UNO PLUS MCB
98821	6A SPN C UNO PLUS MCB
98822	10A SPN C UNO PLUS MCB
98823	16A SPN C UNO PLUS MCB
98824	20A SPN C UNO PLUS MCB
98825	25A SPN C UNO PLUS MCB
98826	32A SPN C UNO PLUS MCB
98827	40A SPN C UNO PLUS MCB

63A SPN C UNO PLUS MCB

URVE
0.5A DP C UNO PLUS MCB
1A DP C UNO PLUS MCB
2A DP C UNO PLUS MCB
3A DP C UNO PLUS MCB
4A DP C UNO PLUS MCB
5A DP C UNO PLUS MCB
6A DP C UNO PLUS MCB
10A DP C UNO PLUS MCB
16A DP C UNO PLUS MCB
20A DP C UNO PLUS MCB
25A DP C UNO PLUS MCB
32A DP C UNO PLUS MCB
40A DP C UNO PLUS MCB
63A DP C UNO PLUS MCB

CODE	ITEM DESCRIPTION
THREE POLE "C" CU	RVE
98843	0.5A TP C UNO PLUS MCB
98844	1A TP C UNO PLUS MCB
98845	2A TP C UNO PLUS MCB
98846	3A TP C UNO PLUS MCB
98847	4A TP C UNO PLUS MCB
98848	5A TP C UNO PLUS MCB
98849	6A TP C UNO PLUS MCB
98850	10A TP C UNO PLUS MCB
98851	16A TP C UNO PLUS MCB
98852	20A TP C UNO PLUS MCB
98853	25A TP C UNO PLUS MCB
98854	32A TP C UNO PLUS MCB
98855	40A TP C UNO PLUS MCB
98856	63A TP C UNO PLUS MCB

THREE POLE NEUT	TRAL "C" CURVE
98857	0.5A TPN C UNO PLUS MCB
98858	1A TPN C UNO PLUS MCB
98859	2A TPN C UNO PLUS MCB
98860	3A TPN C UNO PLUS MCB
98861	4A TPN C UNO PLUS MCB
98862	5A TPN C UNO PLUS MCB
98863	6A TPN C UNO PLUS MCB
98864	10A TPN C UNO PLUS MCB
98865	16A TPN C UNO PLUS MCB
98866	20A TPN C UNO PLUS MCB
98867	25A TPN C UNO PLUS MCB
98868	32A TPN C UNO PLUS MCB
98869	40A TPN C UNO PLUS MCB
98870	63A TPN C UNO PLUS MCB

FOUR POLE "C" CURVE		
98871	0.5A FP C UNO PLUS MCB	
98872	1A FP C UNO PLUS MCB	
98873	2A FP C UNO PLUS MCB	
98874	3A FP C UNO PLUS MCB	
98875	4A FP C UNO PLUS MCB	
98876	5A FP C UNO PLUS MCB	
98877	6A FP C UNO PLUS MCB	
98878	10A FP C UNO PLUS MCB	
98879	16A FP C UNO PLUS MCB	
98880	20A FP C UNO PLUS MCB	
98881	25A FP C UNO PLUS MCB	
98882	32A FP C UNO PLUS MCB	
98883	40A FP C UNO PLUS MCB	
98884	63A FP C UNO PLUS MCB	

98828

## **RESIDUAL CURRENT OPERATED CIRCUIT BREAKER (RCCB)**

RCCB is a device designed to disconnect the load from the supply mains, when the residual current (I\( \D \n)\) flowing in the circuit is more than the rated residual current of a RCCB.

The leakage of currents can be due to direct contact or Indirect contact of Human beings or livestock.

The other causes of leakage current can be due to failure in insulation, cables bitten by rats. It can also be due to aged installed appliances.



#### **Key Features**

- · Position indicator
- · Advanced neutral allows making of Neutral first and breaking of Neutral last; ensuring complete discharge of the circuit
- · Bi-connect terminals for bus bar as well as cable connections
- No nuisance tripping
- IP 20 protection finger touch proof connection terminals
- Large terminal size 35 sq mm
- Truly current operated
- · Manufactured in accordance with IS 12640 Part I
- · Flame retardant body and cover

Residual current operated circuit-breakers functionally independent of line voltage finds application for household and similar uses, not incorporating over-current protection (hereafter referred to as RCCBs), for rated voltages not exceeding 440V a.c. and rated currents not exceeding 125A, intended principally for protection against shock-hazard.

These devices are intended to protect persons against indirect contact, the exposed conductive parts of the installation being connected to an appropriate earth electrode. They may be used to provide protection against fire hazards due to a persistent earth fault current, without the operation of the over-current protective device.

<sup>\*</sup> B Type MCBs are avaiable as on special request. 50A of All Poles are also available on request.



#### **Operating Principle**

RCCB works on the principle of Kirchhoff's current law which states that the "total current or charge entering a junction or node is exactly equal to the charge leaving the node as it has no other place to go except to leave, as no charge is lost within the node". In other words the algebraic sum of ALL the currents entering and leaving a node must be equal to zero, I (exiting)  $^{+}$  I (entering)  $^{=}$  0.

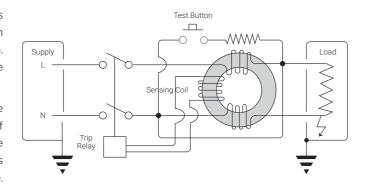
In simple words; Incoming current must be equal to the outgoing current in the circuit.

RCCB construction is made up of a core balance transformer, a sensitive relay and a trip release.

RCCB constantly monitors the vector sum of currents passing through all the conductors.

In normal condition, the vectorial sum of currents is zero (I1+ I2= 0). But during abnormal condition/ earth fault, the vectorial sum is not equal to zero. (I1+ I2=  $\delta$ ). This, thus actuate the relay and hence release the contacts and opens/ trips the RCCB.

UNO Plus RCCB is a True current operated device and is independent of line voltage. In this type of RCCB, the secondary coil of core balance transformer (CBCT) operates sensing relay and thus opening the mechanism, independent of line voltage.



## Effects Of Electric Current Through Human Body



Electrocution should not be viewed in terms of "Current" alone, but in terms of "contact voltage". A person gets electrocuted by coming in contact with an object that has a different potential from his/her own. The difference in potential causes the current to flow through the body.

The amount of current through the human body for a given voltage depends on the resistance of the body. The interior of the human body is a good conductor due to abundance of iron in the body fluids. The main barrier to current flow is the skin. The resistance of the skin decreases significantly when it is wet.

#### PROTECTION AGAINST DIRECT & INDIRECT CURRENT

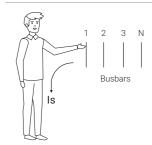
#### Protection Against Direct Contact

Accidental contact with live parts of electric appliances cause earth leakage current to flow through the human body resulting in shocks that may be fatal. RCCB trips immediately under these circumstances and saves human lives. For e.g. when someone makes contact with a live electrical component of a device, touches a live bus bar in distribution panel or unprotected test cables or when a person sticks a metal object into a power socket or touches a live cable.

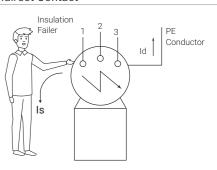
#### Protection Against Indirect Contact

The metal enclosures of electric appliances can become live and cause electric shock to unwary persons touching them during an internal fault or insulation failure. RCCB trips instantaneously and thus removes the possible risk from dangerous indirect contact. Indirect contacts are independent of humans, such as a person touching an electric metal frame. This is when a person makes contact with a metal earthed part which has accidently been powered up following an insulation fault. These type of contacts are very dangerous.

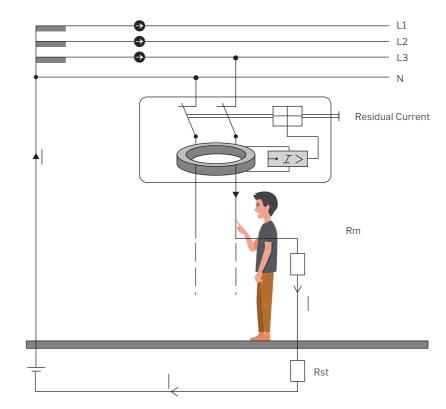
#### Direct Contact



#### Indirect Contact



Is : Touch Current
Id : Insulation Fault Current



●● 128 129 **●●** 



#### FAULT FINDING WHEN RCCB TRIPS

Identifying earth leakage fault with this RCCB as an incomer or sub-incomer is very simple. First, switch off all the Switches/MCBs, switch the RCCB ON and simultaneously switch on the remaining switches one after the other. One would find that while a particular circuit is being switched ON, the RCCB trips time and again. This is the quickest way to identify a faulty circuit/appliance. One can then isolate that faulty circuit, rectify the fault and switch ON the RCCB.

#### Test button (T)

This is provided to verify whether RCCB is functioning properly or not. The test button working can be checked only if it is connected with supply, RCCB shall trip when test button is pressed. "RCCB should ideally be tested once in a month."

#### Neutral Advance Mechanism

The neutral makes first and breaks last before the phase terminals get ON. This helps in discharging of current in case of capacitive current. Vice versa in case the RCCB is OFF.

#### Voltage Independent

UNO Plus RCCB is not voltage dependent and it's a purely current operated circuit breaker. It does not trip if voltage drops, thus providing protection against leakage current at reduced voltage too.

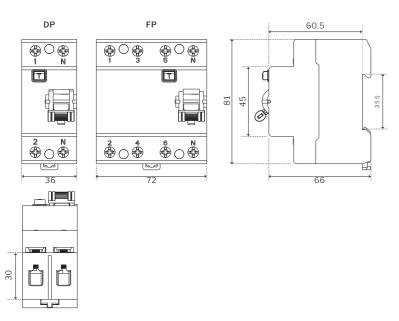
#### Installation

To ensure correct functioning of the RCCB, the neutral conductor on the load side must not be connected to earth, otherwise unwanted nuisance tripping may occur. Care must be taken to ensure that the earth loop impedance as given is not exceeded so that the maximum permissible touch voltage of 50/25V is not exceeded.

#### Protection from Nuisance Tripping

UNO Plus RCCB is truly current operated and operates independent of voltage. It prevents the risk of nuisance tripping due to transient voltage created by lighting, line disturbance (from other equipments) and transient currents (from high capacitive circuits).

#### UNO Plus RCCB Drawings Dimensions (in mm)



#### TECHNICAL SPECIFICATIONS

Sr. No.	FEATURES	UNO PLUS RCCB
1	Standard	IS 12640-1:2016 / IEC 61008-1:2012
2	Rated Current	25,32,40,63A
3	Poles	DP, FP
4	Rated Voltage	DP: AC 240V, FP: AC 240/415V
5	Rated Frequency	50Hz
6	Sensitivity	30, 100, 300mA
7	Rated Insulation Voltage	440Vac
8	Dielectric Strength	2500V
9	Rated Conditional Short Circuit (Icn)	10kA for DP and 6kA for FP
10	Contact Position Indicator	Yes
11	Bi-connect Termination	Yes
12	Туре	AC
13	Terminal Capacity	35mm2
14	Protection	IP20
15	Dimensions (W x H xD) - 2P	36 x 81 x 66 (mm)
16	Dimensions (W x H xD) - 4P	72 x 81 x 66 (mm)

#### ITEM CODE & DESCRIPTION

CODE		ITEM DESCRIPTION					
	DOUBLE POLE RCCB						
	98901	25A DP 30mA UNO PLUS RCCB					
	98902	25A DP 100mA UNO PLUS RCCB					
	98903	25A DP 300mA UNO PLUS RCCB					
	98904	32A DP 30mA UNO PLUS RCCB					
	98905	32A DP 100mA UNO PLUS RCCB					
	98906	32A DP 300mA UNO PLUS RCCB					
	98907	40A DP 30mA UNO PLUS RCCB					
	98908	40A DP 100mA UNO PLUS RCCB					
	98909	40A DP 300mA UNO PLUS RCCB					
	98910	63A DP 30mA UNO PLUS RCCB					
	98911	63A DP 100mA UNO PLUS RCCB					
	98912	63A DP 300mA UNO PLUS RCCB					

CODE	ITEM DESCRIPTION
FOUR POLE RCCE	3
98913	25A FP 30mA UNO PLUS RCCB
98914	25A FP 100mA UNO PLUS RCCB
98915	25A FP 300mA UNO PLUS RCCB
98916	32A FP 30mA UNO PLUS RCCB
98917	32A FP 100mA UNO PLUS RCCB
98918	32A FP 300mA UNO PLUS RCCB
98919	40A FP 30mA UNO PLUS RCCB
98920	40A FP 100mA UNO PLUS RCCB
98921	40A FP 300mA UNO PLUS RCCB
98922	63A FP 30mA UNO PLUS RCCB
98923	63A FP 100mA UNO PLUS RCCB
98924	63A FP 300mA UNO PLUS RCCB

● ● 130 131 ● ●



## **DISTRIBUTION BOARDS (DB)**

UNO Plus Distribution Boards have designed to provide a new dimension of protection in Homes, Offices and Industries. It is equipped with stylish color, elegant curves and distinctive finish that blend with all kinds of interior décor.

UNO Plus Distribution Boards thus offer dual benefits of Flexibility and Safety, enabling safe and efficient distribution of electrical power.

These boards undergo a seven-tank phosphate pre-treatment process to ensure anti-rust conditioning, superior finish and lasting strength. Post this process, premium quality powder coating is applied using the state-of-the-art techniques. These boards are also equipped with top and bottom removable gland plates with a number of knockouts. One can thus install them either flush or wall mounted.



#### **Key Features**

- · Reversible Door
- · Integrated Frame Design
- · Removable Front Door
- · RAL 9003 Texture

- Door Earthing
- · Cement Spill Protector
- · IP43 & IP54 Protection
- · Detachable Gland Plates
- · Front Plate Studs
- · IK 09 Protection

#### Salient Features - Unique Design Feature



#### Pan Assembly

This concept facilitates detaching of the Chassis from the DB and the required wiring for the circuit protection device can be done at a comfortable location.

#### Benefits:

- Easy and comfortable installation of the internal wiring.
- Reduces the installation time and cost.



#### **Reversible Door**

By simply shifting the hinge assembly from left to right the opening of the door can be interchanged depending on the location of the installation.

#### Benefits:

• Unique flexibility as per customer convenience at the time of installation.



## **Cement Spill Protector**

The Cement Spill protector prevents entry of dust or cement particles inside the DB during the construction period at site.

#### Benefits:

- The Cement Spill protector ensures zero infiltration of dust or cement particles inside the DB.
- The portable damage of the door is avoided.



## Protected Neutral Bar on Pan Assembly

- Neutral bar is covered with shrouded for safety.
- Neutral bar placed on pan assembly for ease of wiring.



## **Door Earthing**

Door earthing makes the DB totally shock proof.

#### Benefits:

· Highly shock-proof.



## **Integrated Frame Design**

UNO Plus DB has a unique feature of the frame integrated into the BOX. Benefits:

• Decrease in number of subassemblies, additional space for cables.



#### **Detachable Gland Plates**

With Bigger knockouts Gland Plates at top & bottom are removable.

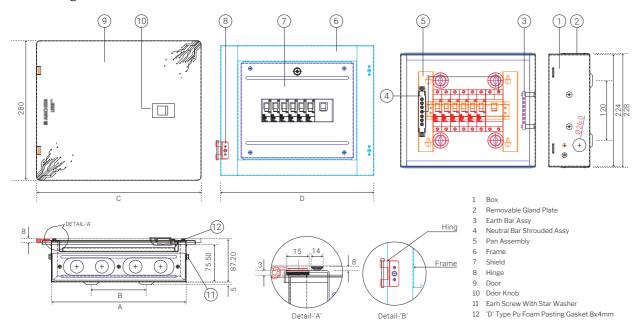
• Easy entry & termination of cables.



## SPN Double Door Distribution Board



## Circuit Diagram



## L X H X D= Length X Height X Depth

				Dimensions (in mm)			Knoc	kout Holes (	ø25 mm)	
CODE	NO. OF WAYS	INCOMING + OUTGOING	SHEET THICKNESS (mm)	Α	В	С	D	ТОР	воттом	EACH SIDE
98651	Way	2+2	1.00	220	170	280	257	2	2	1
98652	6 Way	2+4	1.00	255	75	315	292	2	2	1
98653	8 Way	2+6	1.00	290	110	350	327	3	3	1
98654	12 Way	2+10	1.00	360	180	420	397	4	4	1
98655	16 Way	2+14	1.00	430	250	490	467	5	5	1

\*1.2 mm and 1.6 mm sheet thickness as per customer request

## TECHNICAL SPECIFICATIONS

Sr. No.	FEATURES	UNO PLUS SPN DB
1	DB reference Standard	IEC 61439-3-2012
2	No of Ways	4, 6, 8, 12, 16 way SPN DD
3	Type of Installation	Flush/Surface
4	Colour/ Finish	RAL 9003 Texture
5	Door Locking Options	Sliding Type
6	Removable Gland Plate	Rectangular Cut Out
7	Protection Level of Distribution Board	Gasket Provision
8	Distribution Technique	100A Copper Insulated Bus-bar
9	Bus-bar Rating	63A
10	Incoming	Max 63A
11	Outgoing	Max Individual 63A
12	Voltage Rating	240/415V~
13	Main Incoming Option	MCB or RCCB or ISOLATOR
14	Box Sheet Thickness	1mm
15	Neutral Bar Terminal Capacity	25 sqmm
16	Earthing Bar Terminal Capacity	25 sqmm
17	Protection (IP)	IP 43 / IP54
18	Protection (IK)	lk 09
19	Rated Insulated Voltage (Ui)	690V~
20	Frequency	50Hz
21	Dielectric Strength	2.5KV
22	Ambient Temperature	-5°C to 40°C

## ITEM CODE & DESCRIPTION

CODE	ITEM DESCRIPTION
SPN DOUBLE DOO	OR DB
98951	4 WAY SPN UNO PLUS DD IP43 DB
98952	6 WAY SPN UNO PLUS DD IP43 DB
98953	8 WAY SPN UNO PLUS DD IP43 DB
98954	12 WAY SPN UNO PLUS DD IP43 DB
98955	16 WAY SPN UNO PLUS DD IP43 DB
98961	4 WAY SPN UNO PLUS DD IP54 DB
98962	6 WAY SPN UNO PLUS DD IP54 DB
98963	8 WAY SPN UNO PLUS DD IP54 DB
98964	12 WAY SPN UNO PLUS DD IP54 DB
98965	16 WAY SPN UNO PLUS DD IP54 DB



●● 134 135 ●●

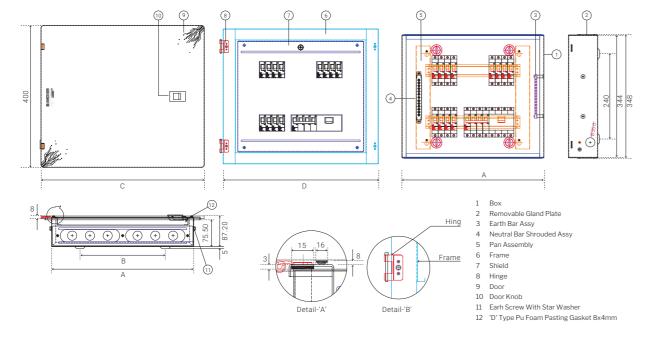


## TPN Double Door Distribution Board



## Circuit Diagram

**136** 



## L X H X D= Length X Height X Depth

				Dimensions (in mm)			Knockout Holes (ø25 mm)			
CODE	NO. OF WAYS	INCOMING + OUTGOING	SHEET THICKNESS (mm)	Α	В	С	D	ТОР	воттом	EACH SIDE
98656	4 Way 4M	2+2	1.00	330	135	390	367	2	2	1
98657	4 Way	2+4	1.00	400	205	460	437	2	2	1
98658	6 Way	2+6	1.00	435	240	495	472	3	3	1
98659	8 Way	2+10	1.00	470	275	530	507	4	4	1
98660	12 Way	2+14	1.00	650	455	710	688	5	5	1

## TECHNICAL SPECIFICATIONS

Sr. No.	FEATURES	UNO PLUS TPN DB
1	DB reference Standard	IEC 61439-3-2012
2	No of Ways	4+12, 8+12, 8+16, 8+24, 8+36 way TPN DD
3	Type of Installation	Flush/ Surface
4	Colour/ Finish	RAL 9003 Texture
5	Door Locking Options	Sliding Type
6	Removable Gland Plate	Rectangular Cut Out
7	Protection Level of Distribution Board	Gasket Provision
8	Distribution Technique	100A Copper Insulated bus-bar
9	Bus-bar Rating	63A
10	Incoming	Max 63A
11	Outgoing	Max individual 63A
12	Voltage Rating	240/415V~
13	Main Incoming Option	MCB or RCCB or ISOLATOR
14	Box Sheet Thickness	1mm
15	Neutral Bar Terminal Capacity	25 sqmm
16	Earthing Bar Terminal Capacity	25 sqmm
17	Protection (IP)	IP 43 / IP 54
18	Protection (IK)	lk 09
19	Rated Insulated Voltage (Ui)	690V~
20	Frequency	50Hz
21	Dielectric Strength	2.5KV
22	Ambient Temperature	-5°C to 40°C

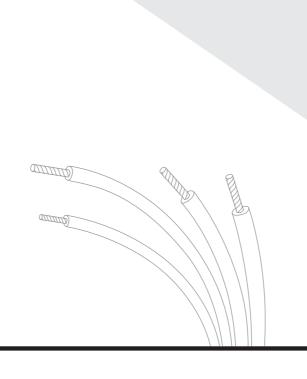
## ITEM CODE & DESCRIPTION

CODE	ITEM DESCRIPTION
TPN DOUB	BLE DOOR DB
98956	4 way TPN 4+12 (4P Incomer) UNO PLUS DD IP43 DB
98957	4 way TPN 8+12 (8P Incomer) UNO PLUS DD IP43 DB
98958	6 way TPN 8+18 UNO PLUS DD IP43 DB
98959	8 way TPN 8+24 UNO PLUS DD IP43 DB
98960	12 way TPN 8+36 UNO PLUS DD IP43 DB
98966	4 way TPN 4+12 (4P Incomer) UNO PLUS DD IP54 DB
98967	4 way TPN 8+12 (8P Incomer) UNO PLUS DD IP54 DB
98968	6 way TPN 8+18 UNO PLUS DD IP54 DB
98969	8 way TPN 8+24 UNO PLUS DD IP54 DB
98970	12 way TPN 8+36 UNO PLUS DD IP54 DB



To be used for A/C (Alternating Current) (~) only

137 ••



# wires & cables

## Naye India ke badhte load ke liye

Anchor Wires & cables are produced in two most modern state-of-the-art manufacturing facilities located at Daman & Kutch. The fully automated plants incorporate the latest in wire & cable technology and manufacturing techniques with electronic / PLC based machines, which ensure a high degree of quality and consistency. At core of Anchor strength is the team of highly qualified and experienced engineers and technocrats, which oversees operations with total commitment to quality and continuous endeavour for improvement to give customers value for money.

The wires & cable range is manufactured as per IS:694 consist of building wires, industrial, residential & agricultural cables and communication cables as per TEC & Anchor specification.



●● 138 139 ●●



## **ADVANCE - FR**

## Superior Conductivity

India's first Advance FR-PVC wire with 101% conductivity, is insulated with an advanced formulation of special ingredients with extra fire fighting properties & higher oxygen and temperature index than those of normal PVC.



- India's first FR wire with 101% copper conductivity (IACS).
- 100% electrolytic grade copper.
- Extra annealing for better flexibility.



































IEC 60227-3:1993+A1:1997





	SINGLE CORE UNSHEATHED 1100 V PVC INSULATED WIRE WITH COPPER CONDUCTOR*								
Product Code	Nominal Area of Conductor* (sq. mm)	Nominal Thickness of Insulation (mm)	Nominal Overall Diameter of Cable (mm)	Current Rating 2 Cable Single Phase ac/dc (Amp)	Max DC Resistance at 20°C (ohm/km) as per IS: 8130	Std. Pkg. (No. of Coils)			
P-27380	0.75	0.6	2.4	7	26	6			
P-27390	1	0.7	2.7	11	19.5	6			
P-27404	1.5	0.7	3.1	14	13.3	6			
P-27415	2.5	0.8	3.7	19	7.98	4			
P-27426	4	0.8	4.1	29	4.95	4			
P-27437	6	0.8	4.7	37	3.3	3			
* - Class 5	Conductor as per IS : 813	30, Length 180 mtr							

	FR ADVANTAGE AS PER IS 694 REQUIREMENT							
Test	Objective	Specification	Method	Obs	ervation			
iest	Objective	Specification	Method	FR Wire	Ordinary PVC Wire			
Critical Oxygen Index	To check and determine the amount of oxygen % required to support combustion of insulating material at room temperature	IS 694:2010	IS 10810 Part-58	>29%	23%			
Temperature Index	To check and determine the temperature at which the normal oxygen content in air (21%) will support combustion of insulating material.	IS 694:2010	IS 10810 Part-64	>250%	150°C			



## **ADVANCE - EFFR**

#### Superior Conductivity

Anchor EFFR wire is insulated with advance formulation of special ingredients with extra fire fighting properties and higher oxygen and temperature index than those of normal PVC. Plus, the flexible conductor provide greater flexibility, 101% conductivity reduces heat generation and saves considerable power power resulting in reduced electrical bills.



3515111

- Extra flexible: 15-20% high bending capacity as compare to ordinary wire
- India's first Advance FR building wire.
- India's first wire with 101% copper conductivity (IACS).
- 100% electrolytic copper.
- Extra annealing for better flexibility.





































#### SINGLE CORE UNSHEATHED 1100 V PVC INSULATED WIRE WITH COPPER CONDUCTOR\* Nominal Area of Nominal Thickness Nominal Overall Current Rating 2 Cable | Max DC Resistance at Std. Pkg. Product Conductor\* (sq. mm) Diameter of Cable Single Phase 20°C (ohm/km) (No. of Coils) of Insulation Code as per IS: 8130 ac/dc (Amp) (mm) (mm) 96102 0.75 0.6 2.4 26 6 96103 0.6 2.7 11 19.5 6 96104 1.5 0.6 3 14 13.3 6 2.5 3.5 19 96105 0.7 7.98 0.8 4.1 29 4.95 96106 4 4 4.7 37 96107 6 0.8 3.3 3 \* - Class 5 Conductor as per IS: 8130, Length 180 mtr

	FR ADVANTAGE AS PER IS 694 REQUIREMENT							
Test	Objective	Specification	Method	0	bservation			
1631	Objective	Specification	Wethod	FR Wire	Ordinary PVC Wire			
Critical Oxygen Index	To check and determine the amount of oxygen % required to support combustion of insulating material at room temperature	IS 694:2010	IS 10810 Part-58	>29%	23%			
Temperature Index	To check and determine the temperature at which the normal oxygen content in air (21%) will support combustion of insulating material.	IS 694:2010	IS 10810 Part-64	>250%	150°C			
	ISO 9001, ISO 14001, BS 0	HSAS 18001 & EN ISO	50001 CERTIFIED CO	MPANY				

## STOC Certification NABCB PRDT 006

IEC 60227-3:1993+A1:1997

### **HFFR**

#### **Superior Conductivity**

The use of Halogen Free Flame Retardant wires is rapidly growing in popularity. Its is used at locations where a high degree of fire prevention against both fire and fire damage has to be installed.

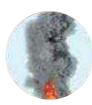
#### **BENEFITS**

HFFR cables are often used when a high degree of protection against fire and fire damage is needed, because of their low smoke emissions, low generation of corrosive and toxic gases and low fire propagation characteristics.













APPLICATIONS

Any location where people spend a great deal of time,

- Public buildings & workplaces
- Public transportation sites
- Industrial locations and vital communications sites such as data centres also need adequate protection in a fire event.

Halogen free flame retardant or Low smoke zero halogen or low smoke free of halogen (LSZH or LSOH or LSOH or LSFH or ZHFR) is a material classification typically used for cable insulation in the wire and cable industry.

Test	Adva	ance FR	Adva	nce EFFR	FRI	LSH	HF	FR	Benefits of HFFR
	Std.	Actual	Std.	Actual	Std.	Actual	Std.	Actual	
Smoke Density Test %	-	Max 75%	-	Max 75%	Max 60%	Max 58%	Max 30%	Max 7%	Less Smoke emission, better visibility, better chance to exit & save more lives in case of fire.
Halogen Gas %	-	More than 30%	-	More than 30%	Max 20%	Max 19%	Max 0.5%	Max 0.3%	Less generation of corrosive and toxic gases which causes suffocation in case of any fire
Oxygen Index %	29%	> 29%	29%	> 29%	29%	> 30%	31%	> 32%	High Oxygen Index compare to others so doesn't allow fire to spread far.

● 144 145 ● ●

## **FIREGUARD FR-LSH**

Superior Conductivity

FR-LSH wire with 101% conductivity (IACS) industry, that is most resistant and least affected by the fire. It emits less corrosive smoke and less toxic halogen acid gas against the ordinary wire.

- India's first wire with 101% copper conductivity (IACS).
- 100% electrolytic copper.
- Extra annealing for better flexibility.
- Emits less corrosive smoke and less toxic halogen acid gas against ordinary wire.























**1**46









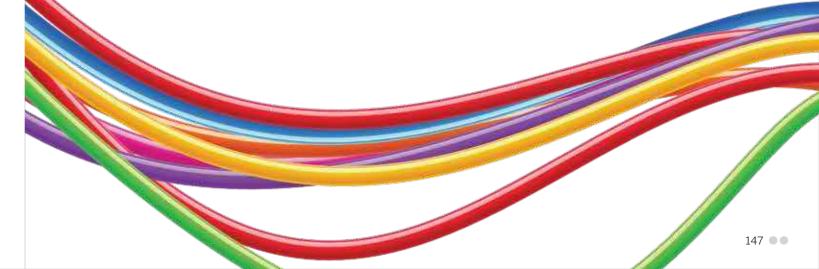


#### SINGLE CORE UNSHEATHED 1100 V PVC INSULATED WIRE WITH COPPER CONDUCTOR\* Current Rating 2 Cable Single Phase Max DC Resistance at 20°C (ohm/km) Nominal Thickness Product Nominal Area of Nominal Overall Code Conductor\* of Insulation Diameter of Cable (No. of ac/dc (Amp) as per IS: 8130 Coils) (mm) (sq. mm) (mm) P-27506 2.7 19.5 6 0.6 11 P-27517 1.5 0.6 14 13.3 P-27528 2.5 0.7 3.5 19 7.98 P-27539 4 0.8 4.1 29 4.95 P-27540 0.8 4.7 37 3.3 6 3

<sup>\* -</sup> Class 5 Conductor as per IS: 8130, Length 180 mtr

	FR ADVANTAGE AS PER IS 694 REQUIREMENT								
Test	Objective	Specification	Method		Observation				
	Conjective	Орестоиноп	Wethou	Fr-LSH Wire	Ordinary PVC Wire				
Critical Oxygen Index	To check and determine the amount of oxygen % required to support combustion of insulating material at room temperature	IS 694:2010	IS 10810 Part-58	>29%	23%				
Temperature Index	To check and determine the temperature at which the normal oxygen content in air (21%) will support combustion of insulating material.	IS 694:2010	IS 10810 Part-64	>250%	150°C				
Smoke Density	To check and determine the visibility (in terms of smoke density) when the insulating material of wire is under fire	IS 694:2010	IS 13360 Part-6/Sec 9	<60%	>80%				
Halogen Acid Gas Evaluation	To check and determine the amount of HCL gas evolved from insulating material of wire under fire	IS 694:2010	IS 10810 Part-59	<20%	>30%				

#### ISO 9001, ISO 14001, BS OHSAS 18001 & EN ISO 50001 CERTIFIED COMPANY





### **SUBMERSIBLE CABLES**

3 Core Flat Sheathed



- Tough & flexible cable with excellent moisture, abrasion & weather resistance.
- Safe, Reliable with excellent Wet Electrical Properties.
- Working Voltage 1100 Volt
- Conductor Bright Annealed >99.9% pure bare copper conductor confirming to IS 8130: 2013
- Color of Cores Red, Yellow, Blue
- Specification IS 694:2010
- Best quality of electrolytic grade copper
- Excellent weather and moisture resistance
- Good insulation properties when submerged in water
- Excellent mechanical & electrical properties
- Progressive sequential length marking on every meter
- Embossing on Sheath
- Outer sheath comprises of highly abrasion resistant PVC compound impervious to grease, oil and water etc.
- Available in drums of cable length 500 mtr +/- 5%
- Cable can be provided at a length of 100 mtr and 300 mtr as per customer requirements.



Nominal Crosssectional

area of Conductor

(sq. mm)





Nominal Thickness

of Insulation

(mm)

0.6

0.7

0.8

0.8

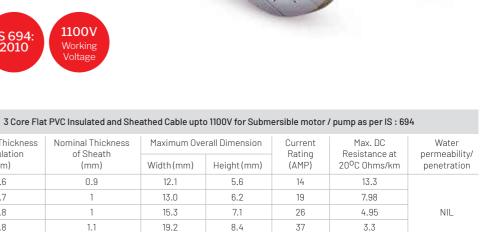
1.00



Nominal Thickness

of Sheath

1.4



1.91

Note: The insulation & sheath thickness given in the table are nominal values. For conductor the conductor resistance as per IS: 8130 IS governing criteria.

24.2

29

10.4

Avaiable in drums of cable length 500 mtr +/- 5% and 100 mtr coil.

## MULTI CORE FLEXIBLE CABLE

Anchor Multi-core FR PVC insulated and PVC Sheathed Flexible cable conforming to IS 694 is made with a highly flexible conductor and specially formulated FR (Flame Retardant) flexible PVC insulation and PVC sheathing compound that impart superior flexibility to the cable.

Product is available in 100 mtr coil wrapped with suitable material.

Product can be provided in 300 mtr & 500 mtr on wooden drums.



### **MULTI CORE SHEATHED CABLE**







Anchor multicore cables are having a wide range of application in housing appliances, machine tools, control panels & other industrial applications. The product is made from specially formulated PVC compound which has excellent flexibility, abrasion properties & uniform laying which make it easily strippable.

**Copper:** At the core of Anchor Cable is an electrolytic copper conductor with >99.9% purity and 101% conductivity as per IACS (International Annealed Copper Standard), fully annealed to impart the desired softness and extra flexibility in class 5 conductor bunched in to a compact cohesive and uniform conductor.

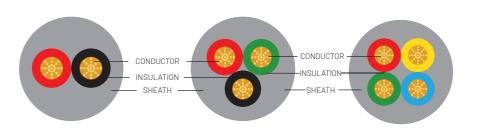
**Insulation:** The FR PVC insulation is made of specially formulated proprietary compound that has high insulation resistance, thermal stability and exceptional flame retardant properties, suitable for installation in environs of high temperature and adverse condition. The insulation is applied on a state-of-art PLC based fully automatic insulation line that ensures correct diameter/thickness and concentricity, further enhancing the reliability and longevity of the cable.

**Laying Up:** The required number of cores in specified colours are laid up with proper lay and optimum tension to form an assembled cable that retains the circular shape and does not allow the cores to open or twist out of shape during further processing. The laying up is carried out in an important machine which applies uniform tension on all the cores resulting in a compact round assembly, correct laid up diameter, essential for maintaining uniform sheath thickness.

**Sheath:** It is provided to protect the insulated cores from mechanical damage. The sheathing compound with superior mechanical strength and desired flexibility to withstand rigorous use involving impact and abrasion. It is easily separable from cores.

**Quality Assurance:** Right from the beginning, Quality Assurance has been the cornerstone at Panasonic Life Solutions India Pvt. Ltd. which is embedded in a material, manufacturing process and supply chain. This commitment is reflected in ISO 9001:2015 accreditation and maintained by ceaseless inspection, checks and testing right from raw material stage through manufacturing to packing stage.

	FLEXIBLE PVC INSULATED AND SHEATHED CABLE (CIRCULAR) UP TO 1100V AS PER IS: 694									694			
Nom Cross	No / Nom	Nominal	Single Core		2 C	ore	3 C	ore	4 C	ore	*5 Cd	ore	
Sectional Area of Conductor	Dia of Wire		Nominal Thickness of Sheath	Approx. O/all Dia	Max DC Resistance at 20°C								
mm²	Nos./mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Ohm/km
0.5	16/0.2	0.6	0.9	4.3	0.9	6.9	0.9	7.3	0.9	8	0.9	8.7	39
0.75	24/0.2	0.6	0.9	4.5	0.9	7.3	0.9	7.7	0.9	8.4	0.9	9.2	26
1	32/0.2	0.6	0.9	4.7	0.9	7.6	0.9	8.1	0.9	8.8	1	9.6	19.5
1.5	32/0.25	0.6	0.9	5.4	0.9	8.9	0.9	9.4	1	10.4	1	11.4	13.3
2.5	48/0.25	0.7	1	6.2	1	10.3	1	10.9	1	12	1	13.2	7.98
4	56/0.3	0.8	1	6.8	1	11.6	1	12.4	1	13.6	1.1	15.3	4.95



Nom Cross	No. / Nom	Nominal	* Sing	le Core	2.0	ore	3.0	ore	4 0	ore	
Sectional Area of Conductor	Dia of Wire	Thickness of Insulation	Nominal Thickness of Sheath	Approx O/all Dia	Nominal Thickness of Sheath	Approx. O/all Dia	Nominal Thickness of Sheath	Approx. O/all Dia	Nominal Thickness of Sheath	Approx. O/all Dia	Max DC Resistance at 20°C
mm²	Nos. / mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Ohm / km
6	80/0.3	0.8	1.1	7.5	1.1	13	1.2	13.8	1.2	15.47	3.3
10	144/0.3	1	1.3	9.4	1.3	16.5	1.4	17.69	1.4	19.5	1.91
16	128/0.4	1	1.4	10.9	1.4	19.4	1.4	20.6	1.4	23	1.21
25	196/0.4	1.2	1.4	13.6	1.4	23.8	1.5	25.6	1.6	28.5	0.78
35	272/0.4	1.2	1.6	15.5	1.6	27.2	1.6	29.3	1.7	32.7	0.554

●● 150 151 ●●



Anchor communication cables such as Telephone & Switchboard cables and LAN cables, are useful for telephone conversations as well as send and receive computer data & photographic images, among other things, and they prevent interception and interference more effectively than wireless communication methods.

Telephone cables are designed for improved voice transmission, quality-giving clarity and eliminating cross-talk. Use of electrolytic grade copper conductor of high purity and uniform diameter having low resistance eliminates voice loss, giving crisp clarity.

Anchor CAT 6 LAN cables are simple, cost-effective and support high-speed transmission performance, digital and analogue voice and video (RGB) signals on LANs.

## TELEPHONE & SWITCH BOARD CABLES

Anchor Telephone & Switch Board Cable, designed for voice clarity and elimination of cross-talk, are most suitable for indoor use in the large office/ residential buildings, hotels and industrial complex for interconnection of telephone and intercom system, PBX and in central exchange for interconnection of distribution frames, switching and transmission equipment.





**VOICE CLARITY & NO VOICE LOSS:** High purity 99.97% electrolytic grade copper conductor of uniform diameter with 100%+ conductivity positive tolerance and having balanced low resistance in a pair eliminates voice loss giving crisp clarity.

**ZERO NOICE & NO CROSSTALK:** The concentric uniform thickness of insulation without internal imperfections, high insulation resistance, differential lay lengths of pair and staggered positioning of pairs which eliminate noise and disturbances caused by outside electromagnetic interference and cross-talk, i.e. picking up the transmission through adjoining lines, thus, improving clarity and quality of voice.











<sup>\*10</sup> Pair & above

Electrical Parameter

Conductor Resistance at 20°C (Max) : 0.4 mm - 143  $\Omega/km$  & 0.5 mm - 92.20  $\Omega/km$ 

Mutual Capacitance: Max 50 nf/km Capacitance Unbalance paid to pair: Max 230 PF/km

● 152 153 ● **●** 



## UTP CAT6 LAN CABLE

Anchor's unshielded twisted pair (UTP) LAN Cables Category 6 is designed to support an optimum speed offering superior performance for streaming video and multimedia, faster data transmission over the Local Area Network (LAN). Anchor CAT-6 cable is targeted as a preferred cable for use in many homes and business-based ethernet network.

## CAT-6 UTP Cable supports Gigabit Ethernet (1000 Base-T) standard. Operates at bandwith up to 250 MHz.

- Comply with Cat.6 specifications
- 4-pair unshielded twisted pair (UTP) cable
- 23 AWG solid copper conductor for superior conductivity
- HDPE insulation
- PE separator
- FR PVC Jacket
- Verified compliant with TIA standards
- RoHS Complaint
- High speed data access
- Cable supports frequencies up to 250 MHz.
- Cable supports data transfer speeds up to 1000Mbps Gigabit
- Conductor Metal: 99.9 % pure Solid Bare Copper.













#### Colour code: No. of Pairs - 4

Pair 1: White and Blue Pair 3: White and Green Pair 2: White and Orange Pair 4: White and Brown



Separator

#### SPECIFICATIONS

- Category: Category 6-4 pairs unshielded twisted pair (UTP) cables
- Conductor Metal: >99.9% pure solid bare copper
- Colour: Light grey
- Insulation Diameter: 1.53 mm max.
- Insulation Material: HDPE
- Jacket Material: Flame Retardent (FR) PVC compound
- Cable Diameter: 6.0 <u>+</u> 0.25 mm
- Separator: Specially designed PE separator

#### **TECHNICAL DETAILS**

- Mutual Capacitance: Max. 5.6 nf / 100 mtrs.
- Characteristic Impedance: 100 ± 15% (± 0hm)
- Nominal Velocity of Propagation: Min. 65% @ 250 MHz
- Conductor Resistance (DC): Max. 9.38 Ohms / 100 mtrs. @ 20°C
- Resistance Unbalance: Max 2%
- Capacitance Unbalance: 160 pf/100 mtrs
- Delay Skew: Max 45nS / 100 mtrs @ 20°C
- Bending Radius: 4 x Cable Diameter
- Pulling Force: Max. 11.5 kg
- Operating Environment: Indoor









### The only choice, for the clearest TV reception

Anchor Coaxial Cables are manufactured with latest state of art manufacturing and testing facilities, the cables are specially designed processed and tested to resist moisture, heat and humidity to suit extreme Indian weather conditions. A fully computerized process monitoring and quality control system ensures consistency, reliability and optimum electrical characteristics (including minimum db loss) for our digital cables giving fullest satisfaction over a long span to end-users

A coaxial cable is one that consists of two concentric conductors that share a common axis; hence the cable is called coaxial. Data is transmitted through the center conductor, while the outer braided layer serves as a line to ground & functions as a shield to reduce coupling of the signal.

#### **RG 6 CO-AXIAL CABLES**

Anchor co-axial cables are specially designed for transmission of high frequency signals with minimum losses. The various configurations of our cables are solid copper center conductor and also available in Copper Clad Steel (CCS), Polyethylene produced by gas injection, Aluminum Mylar tape to provide 100% coverage, Aluminum alloy wire braids to give additional mechanical strength, PVC Sheath cover to give environmentally secured safe seal to the construction.

#### Features

- >99.9% pure copper conductor
- Good tensile strength
- Better velocity propagation
- Low loss of signal quality so better reception
- Minimum structural return loss
- Low attenuation values over wide band of frequencies, thus signals are protected from external electromagnetic interference
- Higher bandwidth larger network expansion, 100 plus channels

#### Applications

- These cables are used for transmission of video and audio signals.
- Handles greater number of CATV channels, over 100 channels.

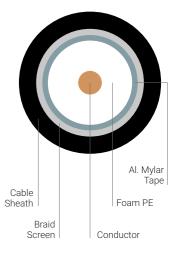
#### **Constructional Specifications**

Conductor: The central conductor is made of annealed bare copper or copper clad steel Insulation: Insulation provided over the conductor with di-electric foam made of polyethylene injected with nitrogen gas, which is superior and environment friendly as compare to chemical foam

Screen: Aluminum mylar tape is provided over the insulated conductor to shield the conductor and ensure disturbance free transmission of signals

Braiding: Aluminum alloy braiding provided is with maximum coverage

Sheath: The special jacketing offers increased life even in rugged conditions of cable. Packing: Available in 305 meter  $\&\,100$  meter.



● 156 157 ● **●** 

#### **Technical Specifications**

Parameters	Unit	VALUES
Conductor		
Type of material	Type	Electrolyte solid copper / Copper Clad Steel
Diameter of Strand (Nominal)	mm	1.0
Insulation		
Type of material	Type	Foam Polyethylene
Insulation Diameter (Nominal)	mm	4.57
Concentricity of insulation	%	95
Color of Insulation		Natural
First Shielding		
Material		Bonded Poly-laminated Aluminum Tape
Coverage	%	100
Second Shielding		
Material		Braid with Aluminum alloy wire
Braiding Coverage	%	65
Flooding Compound		Jelly
Outer Jacket		
Type of material		FR PVC (Black)
Nominal diameter of Jacket	mm	7
Nominal Jacket thickness	mm	1.2
Bending Radius minimum	mm	65
Maximum Resistance at 20°C	Ohm/100m	2.71 / 12.8
Nominal Capacitance	pf/mtr	53
Nominal Impedance	Ohms	75
Nominal Velocity Ratio	%	85 min.
Attenuation		
Frequency(MHz)	Max. dB/100 m	Max. dB/100 m
55	Max. dB/100 m	5.25
100	Max. dB/100 m	6.73
200	Max. dB/100 m	9.90
250	Max. dB/100 m	10.82
300	Max. dB/100 m	11.64
350	Max. dB/100 m	12.63
400	Max. dB/100 m	13.61
450	Max. dB/100 m	14.43
500	Max. dB/100 m	15.29
600	Max. dB/100 m	16.73
750	Max. dB/100 m	18.54
800	Max. dB/100 m	19.50
900	Max. dB/100 m	20.1
1000	Max. dB/100 m	21.49

#### **CCTV CABLE**

Anchor CCTV Cables are manufactured with latest state-of-art manufacturing and testing facilities, the cables are specially designed, processed and tested to resist moisture, heat and humidity to suit Indian weather conditions. A fully computerized process monitoring and quality control system ensures consistency, reliability and optimum electrical characteristics (including minimum db loss) for our digital cables giving fullest satisfaction over a long span to end-users.

CCTV Cable is the composite structure of Video and Audio wires intended to install the cameras with audio system from one point to equipment system. Cable is capable of carrying video signal with audio power wire for complete video surveillance. These cables are designed to transmit the complete video with minimum distortion.

#### **Features**

- Electrolytic grade copper having >99.9% purity.
- · Good tensile and mechanical strength.
- Low loss of signal quality so providing high performance with clear picture even on low frequency.
- · Min. distortion of video frequency range.
- Low attenuation values over wide band of frequencies, thus signals are protected from external electromagnetic interference.

#### **Applications**

Closed Circuit Television (CCTV) cables are used to transmit the signals from CCTV Camera to the receiver with minimum distortion or attenuation.

#### **Constructional Specifications**

Conductor: The central conductor is made of electrolytic grade copper having >99.9% purity.

Insulation: The insulation provided over the conductor is of HDPE with high dielectric strength and low capacitance.

Shield: 60% coverage approx.

Sheath (RG 59): Black colored.

Outer Sheath: White.

Packing: Available in 90 meter and 305 meter.



Sharp Video Clear Audio



Less Signal Loss



Audio, Video & Power



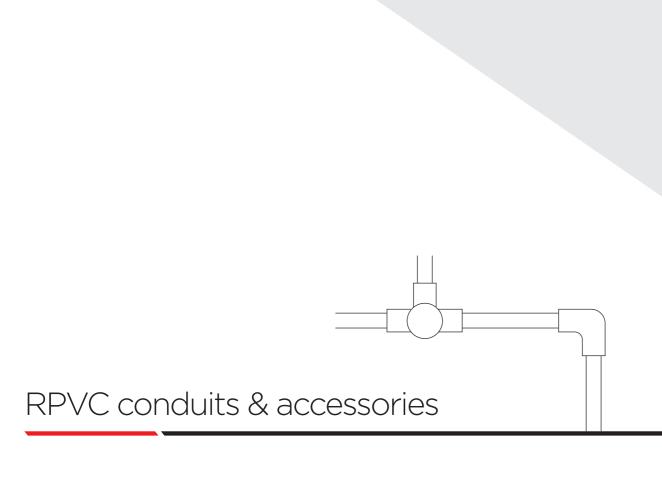


● 158 159 ● **●** 

#### **Technical Specifications**

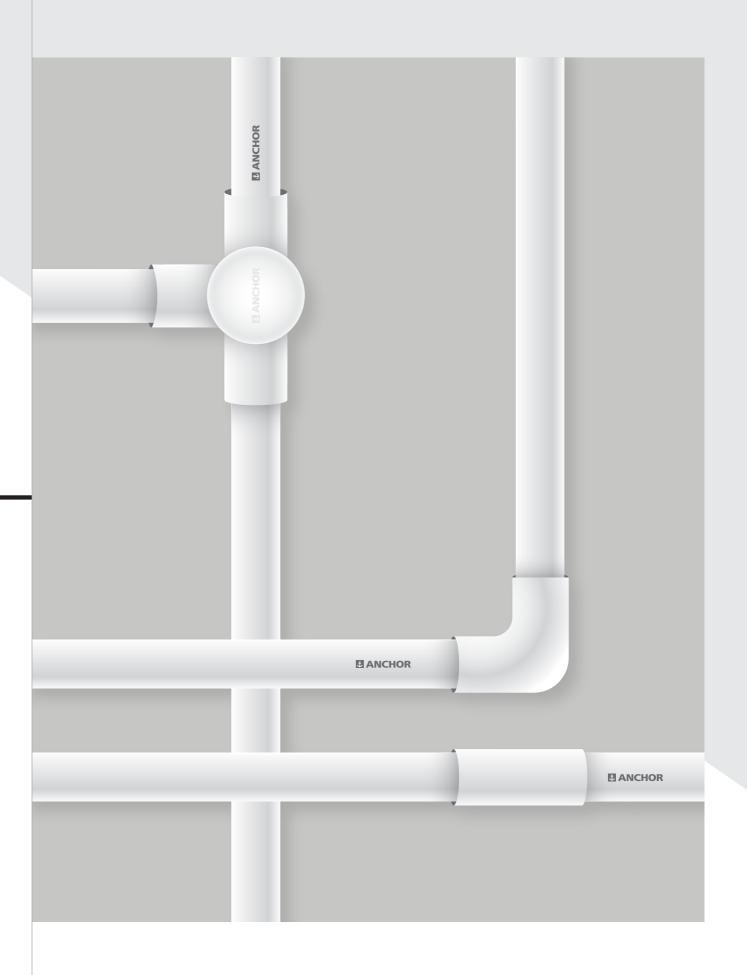
Parameters	3+1	4+1
Inner Conductor		
Material	Annealed Solid Bare Copper	Annealed Solid Bare Copper
Diameter	0.8 mm ± 0.1 mm	0.8 mm ± 0.1 mm
Di-Electric		
Material	Gas Injected Physical Foam Polyethylene	Gas Injected Physical Foam Polyethylene
Diameter	3.55 mm Nominal	3.55 mm Nominal
Thickness	NA	NA
Shield		
1st Shield	Bonded Aluminum Tape	Bonded Aluminum Tape
2nd Shield	Aluminum Alloy Braid	Aluminum Alloy Braid
Coverage	Nominal 60%	Nominal 60%
Jacket		
Material	PVC (Black)	PVC (Black)
Diameter	5.60 mm approx	5.60 mm approx.
Bending Radius	65 mm min.	65 mm min.
Electrical Specification		
Characteristic Impedance	75 ± 3 Ohm	75 ± 3 Ohm
Structural Return Loss	Min. 15 dB @ 1 - 1000 MHz	Min. 15 dB @ 1 - 1000 MHz
Nominal Velocity Ratio	85%	85%
Performance Frequency (MHz)	Attenuation max (dB/100m)	Attenuation max (dB/100m)
55 MHz	6.73	6.73
187 MHz	11.81	11.81
300 MHz	14.6	14.6
550 MHz	19.52	19.52
750 MHz	22.87	22.87
865 MHz	24.67	24.67
1000 MHz	26.64	26.64
Core		
Conductor	0.5 ± 0.05 mm Solid Bare Annealed Copper	0.5 ± 0.05 mm Solid Bare Annealed Copper
Insulation	HDPE	HDPE
Diameter of Insulation	0.9 mm Nominal	0.9 mm Nominal
Color Codes	Red, Blue, Yellow	Red, Blue, Yellow, Black
Overall Jacket	PVC TYPE ST1 Grade confirming to IS 5831	PVC TYPE ST1 Grade confirming to IS 5831
Overall Diameter	8.50 mm max	9.50 mm max





## Wire Artery

Perfect Partner for your Wires and Cables.



● 162 163 ● ●



Anchor Rigid Conduit PVC Pipes and Accessories are manufactured from a specially formulated unplasticised ployvinyl chloride (UPVC) to meet stringent Indian standards. Our products are made of Extra Super High Impact material which make them safe to be use in harsh environments. The products are maufactured in accordance with IS:9537 (Part III) for PVC conduit pipes and IS:3419 for junction boxes.

Applications: Channelising concealed and surface wirring, telecommunication and cable ducting.

#### Dimensions of Round Conduits [as per IS:9537 (Part III)]

Nominal Size (mm)	Outer Diameter (mm)	Tolerance on Outside Diameter (mm)	Inside [ Light	Diameter (Mi Medium	n) (mm) Medium
20	20	-0.3	17.4	16.9	15.8
25	25	-0.4	22.1	21.4	20.6
32	32	-0.4	28.1	27.8	26.6
40	40	-0.4	35.8	35.4	34.4
50	50	-0.5	45.1	44.3	43.2

#### **Technical Features & Benefits**

General Features	
(a) Raw Material	PVC - K-67 for Conduits & K-57 for accessories
(b) Installation	Smooth finish from inside makes wire pulling easy
(c) Resistance to corrosion	Corrosion free material
Electrical Characteristics (As per IS 953	7 Part III & IS 3419)
(a) Electric Strength	No breakdown observed at 2000V
(b) Insulation Resistance	Min 1000 MΩ
Mechanical Strength (As per IS 9537 Par	rt III)
(a) Imapct Resistance	No cracks visible
(b) Compression Resistance	Retains the original shape on the removal of the force
(c) Bending Strength	No cracks visible at 180° bending
Thermal Strength (As per IS 9537 Part II	I & IS 3419)
(a) Thermal Resistance	$-5^{\circ}$ C to + $60^{\circ}$ C
(b) Resistance to Burning	Flame retardent (Flame die out within 30 Sec)
Environmental Strength (As per IS 3419)	
(a) Resistance to Acid Solution	No detoriation
(b) Resistance to Alkaline Solution	No detoriation
(c) Resistance to Oil	No detoriation

## RIGID PVC CONDUIT PIPES (ROUND)

IS:9537 **⑤** PART III (HSN: 3917)

- Wrinkle free bending assures smooth passing of wire
- Smooth surface finish for enhanced aesthetics
- Offer more value for money as compared to the steel / aluminium conduits
- Corrosion proof finish complete protection from rust, salinity and humidity
- Uniformity of wall thickness
- Light weight and easy to transport & handle
- Offer good mechanical protection for the resident cables
- Longer operational as well as shelf life as compared to the metal conduits
- Self extinguishing PVC materials offers added flame resistance
- Each batch is tested through computerized laboratory

Size	Produc	t Code	Std Pck.
OD (mm)	Ivory	Black	(1 no.=3mtr)
LMS (Light M	lechanical Stress)		
19*	CP19SLIV	CP19SLBL	50
20	CP20SLIV	CP20SLBL	50
25	CP25SLIV	CP25SLBL	50
32	CP32SLIV	-	25
40	CP40SLIV	-	15
50	CP50SLIV	-	15
MMS (Mediu	m Mechanical Stress)		
19*	CP19SMIV	CP19SMBL	50
20	CP20SMIV	CP20SMBL	50
25	CP25SMIV	CP25SMBL	50
32	CP32SMIV	-	25
40	CP40SMIV	-	15
50	CP50SMIV	-	15
HMS (Heavy	Mechanical Stress)		
19*	CP19SHIV	CP19SHBL	50
20	CP20SHIV	CP20SHBL	50
25	CP25SHIV	CP25SHBL	50
32	CP32SHIV	-	25
40	CP40SHIV	-	15
50	CP50SHIV	-	15

<sup>\*</sup>Special size not available with ISI marking



Conduit Colour	LMS	MMS	HMS
Black			
Ivory			

## Conduits are available in grey color on made to order basis for FTL requirements

## **PVC TRUNKING (HSN:3916)**

Product Code	Size (mm)	Std Pck. (in Nos.)
* TR2012CIV	20x12	200
# TR2512CIV	25x12	100
# TR3212CIV	32x12	100





# **CONDUIT ACCESSORIES**

HSN: 3917









Size	Product Type	Produ	ict Code	Std Pck.
OD (mm)		Ivory	Black	
COUPLER				
20	Coupler	CA20CPLIV	CA20CPLBL	200
25	Coupler	CA25CPLIV	CA25CPLBL	100
32	Coupler	CA32CPLIV	-	60
40	Coupler	CA40CPLIV	-	35
50	Coupler	CA50CPLIV	-	15
TEE				
20	Tee	CA20TEEIV	CA20TEEBL	100
25	Tee	CA25TEEIV	CA25TEEBL	50
ELBOW				
20	Elbow	CA20EBWIV	CA20EBWBL	100
25	Elbow	CA25EBWIV	CA25EBWBL	50







BEND						
SLIP BEND - NORMAL						
20	Slip Bend Normal	CA20SLBIV	CA20SLBBL	100		
25	Slip Bend Normal	CA25SLBIV	CA25SLBBL	100		
32	Slip Bend Normal	CA32SLBIV	-	50		
40	Slip Bend Normal	CA40SLBIV	-	25		
50	Slip Bend Normal	CA50SLBIV	-	10		
SLIP BEI	ND - LONG					
20	Slip Bend - Long	CA20SLBLIV	-	90		
25	Slip Bend - Long	CA25SLBLIV	-	60		
SLIP BEND - HEAVY						
20	Slip Bend - Heavy	CA20SLBHIV	-	100		
25	Slip Bend - Heavy	CA25SLBHIV	-	100		

● ● 166 167 ● ●

## **CIRCULAR BOXES**

IS:9537 **IS** (HSN: 3917)



Size	Product Type	Produc	t Code	Std Pck.		
OD (mm)		Ivory	Black			
CIRCULAR SURFACE BOXES WITH LID - DEEP						
20	Terminal Type (1 Way)	CA20CBLD1IV	CA20CBLD1BL	10		
25	Terminal Type (1 Way)	CA25CBLD1IV	CA25CBLD1BL	10		
32#	Terminal Type (1 Way)	CA32CBLD1IV	-	10		
20	Angle Type (2 Way)	CA20CBLD2AIV	CA20CBLD2ABL	10		
25	Angle Type (2 Way)	CA25CBLD2AIV	CA25CBLD2ABL	10		
32#	Angle Type (2 Way)	CA32CBLD2AIV	-	10		
20	Through Type (2 Way)	CA20CBLD2TIV	CA20CBLD2TBL	10		
25	Through Type (2 Way)	CA25CBLD2TIV	CA25CBLD2TBL	10		
32#	Through Type (2 Way)	CA32CBLD2TIV	-	10		
20	TEE Type (3 Way)	CA20CBLD3IV	CA20CBLD3BL	10		
25	TEE Type (3 Way)	CA25CBLD3IV	CA25CBLD3BL	10		
32#	TEE Type (3 Way)	CA32CBLD3IV	-	10		
20	Intersection Type (4 Way)	CA20CBLD4IV	CA20CBLD4BL	10		
25	Intersection Type (4 Way)	CA25CBLD4IV	CA25CBLD4BL	10		
32#	Intersection Type (4 Way)	CA32CBLD4IV	-	10		

CIRCU	LAR LID WITH SCREW			
65	Circular Lid with Screw	CA65CLSIV	_	100

CIRCU	CIRCULAR SURFACE BOXES WITH LID - SURFACE					
20	Terminal Type (1 Way)	CA20CBLS1IV	CA20CBLS1BL	25		
25	Terminal Type (1 Way)	CA25CBLS1IV	CA25CBLS1BL	20		
20	Angle Type (2 Way)	CA20CBLS2AIV	CA20CBLS2ABL	25		
25	Angle Type (2 Way)	CA25CBLS2AIV	CA25CBLS2ABL	20		
20	Through Type (2 Way)	CA20CBLS2TIV	CA20CBLS2TBL	25		
25	Through Type (2 Way)	CA25CBLS2TIV	CA25CBLS2TBL	20		
20	TEE Type (3 Way)	CA20CBLS3IV	CA20CBLS3BL	25		
25	TEE Type (3 Way)	CA25CBLS3IV	CA25CBLS3BL	15		
20	Intersection Type (4 Way)	CA20CBLS4IV	CA20CBLS4BL	25		
25	Intersection Type (4 Way)	CA25CBLS4IV	CA25CBLS4BL	15		

# Special size. Not available with ISI Marking MRP Mentioned for Circular Boxes in inclusive of lid  $\&\,a$  pair of screw

## **NEW ARRIVAL**

HSN: 8538









Size	Product Type		Product Code		Std Pck.
OD (mm)		White	Ivory	Black	
108	Round Tape	CA4RPWH	-	-	140
125	Round Tape	CA5RPWH	-	-	80
25	LED Box	-	-	CALB25BL	12
20/25	Fan Box Without Rod	-	CAFBIV	-	6
FAN BOX WITH ROD (HSN:8536)					
20/25	Round Fan Box	-	CAFBRIV	-	2
20	Round Fan Box	-	CAFBR20IV	-	2
25	Round Fan Box	-	CAFBR25IV	-	2
20 (H:2")	Octagonal Fan Box	-	-	CAFBOR20ABL	2
20 (H:2.5")	Octagonal Fan Box	-	-	CAFBOR20BBL	2
25 (H:2")	Octagonal Fan Box	-	-	CAFBOR25ABL	2
25 (H:2.5")	Octagonal Fan Box	-	-	CAFBOR25BBL	2











Size	Product Type	Product	Code	Std Pck.
OD (mm		Ivory	Black	
NON ISI	CIRCULAR BOXES WITH LID			
20	Terminal Type (1 Way)	CA20CBLNS1IV	-	30
25	Terminal Type (1 Way)	CA25CBLNS1IV	-	24
20	Through Type (2 Way)	CA20CBLNS2TIV	-	30
25	Through Type (2 Way)	CA25CBLNS2TIV	-	20
20	TEE Type (3 Way)	CA20CBLNS3IV	-	30
25	TEE Type (3 Way)	CA25CBLNS3IV	-	24
20	Intersection Type (4 Way)	CA20CBLNS4IV	-	30
25	Intersection Type (4 Way)	CA25CBLNS4IV	-	20

# PLASTIC SURFACE BOXES

HSN: 8538

- · Rigid & Strong design with better mechanical strength · Ribs on lid to avoid to warpage of the box after installation
- Suitable for MCB installation Cutouts available for Conduits & Casing
- $\cdot$  Enhanced aesthetics  $\cdot$  Brass insert for screw fixing  $\cdot$  Suitable for non-modular accessories



Product Code		Std. Pack
White	Ivory	(Nos.)
PB0404BW	PB0404BIV	10
PB0404CW	PB0404CIV	10
PB0404DW	PB0404DIV	10
PB0407BW	PB0407BIV	5
PB0608BW	PB0608BIV	5
PB0810BW	PB0810BIV	5
PB1012BW	PB1012BIV	5
	White  PB0404BW  PB0404CW  PB0404DW  PB0407BW  PB0608BW  PB0810BW	White         Ivory           PB0404BW         PB0404BIV           PB0404CW         PB0404CIV           PB0404DW         PB0404DIV           PB0407BW         PB0407BIV           PB0608BW         PB0608BIV           PB0810BW         PB0810BIV



Product Type	Produc	Product Code		
	White	Ivory	(Nos.)	
Plastic Surface Boxes, 4"x4"	PB0404AW	PB0404AIV	10	
Plastic Surface Boxes, 4"x7"	PB0407AW	PB0407AIV	5	
Plastic Surface Boxes, 6"x8"	PB0608AW	PB0608AIV	5	
Plastic Surface Boxes, 8"x10"	PB0810AW	PB0810AIV	5	
Plastic Surface Boxes, 10"x12"	PB1012AW	PB1012AIV	5	

## **METAL BOXES**

HSN: 8538

## CONCEALED GALVANISED METAL BOXES



- · GI Boxes with 120 GSM
- Rust prevention up to 250 hrs. in salt spray test (Red Rust)
- Good quality threads Earthing terminal to avoid shock
- Suitable for modular accessories

Product Code	Module	Size (mm)	Depth (mm)	Std. Pack (Nos.)
Concealed	l GI Sheet Metal Boxes (20 Ga	nuge)		
21780	1 or 2 Module	79x75	46	10
21452	3 Module	79x99	46	10
21791	4 Module	79x135	52	10
21463	6 Module	79x207	52	10
30453	8 or 9 Module Horizontal	79x230	52	5
21474	8 Module Rectangular	132x135	56	5
21485	12 Module	132×207	56	5
21736	16 Module	142x230	56	5
21758	18 Module	207x207	60	5
Concealed	l GI Sheet Metal Boxes (18 Ga	uge)		
35640	1 or 2 Module	79x75	46	10
35650	3 Module	79x99	46	10
35661	4 Module	79x135	52	10
35672	6 Module	79x207	52	10
35683	8 or 9 Module Horizontal	79x230	52	5
35394	8 Module Rectangular	132x135	56	5
35708	12 Module	132x207	56	5
35719	16 Module	142x230	56	5
35720	18 Module	207x207	60	5
Concealed	l GI Sheet Metal Boxes (16 Ga	uge)		
35785	1 or 2 Module	79x75	46	10
35796	3 Module	79x99	46	10
35800	4 Module	79x135	52	10
35810	6 Module	79x207	52	10
35832	8 or 9 Module Horizontal	79x230	52	5
35821	8 Module Rectangular	132x135	56	5
35843	12 Module	132×207	56	5
35854	16 Module	142x230	56	5
35865	18 Module	207x207	60	5
Stainless S	Steel Metal Boxes			
36001	1 or 2 Module	79x75	46	10
36002	3 Module	79x99	46	10
36003	4 Module	79x135	52	10
36004	6 Module	79x207	52	10
36005	8 or 9 Module Horizontal	79x230	52	5
36006	8 Module Rectangular	132x135	56	5
36007	12 Module	132x207	56	5
36008	16 Module	142x230	56	5

207x207

\* S.S. box also available on request

18 Module

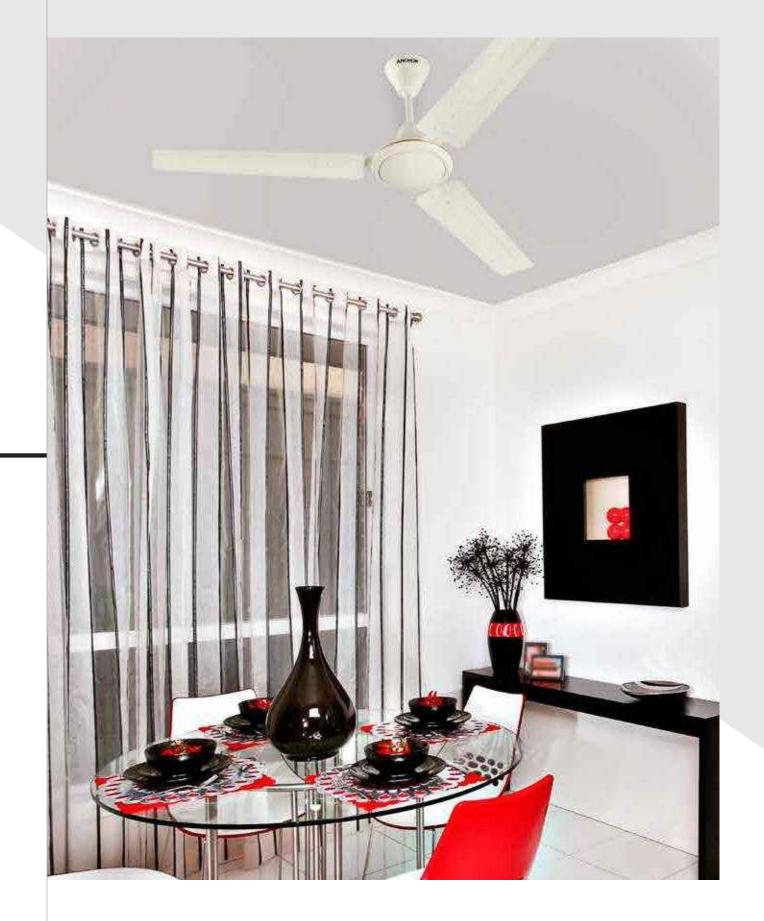
36009

## IAQ (indoor air quality)



## Stay cool. Stay refreshed.

Designed to inspire awe, Anchor's wide array of ceiling, TPW & Exhaust Fans refresh your mood with a cool breeze, the moment you step indoors. These ingeniously designed, energy-efficient fans not only assist you in cooling your household but their stylish designs add a subtle gleam to your adobe. The aerodynamic blades ensures maximum air delivery, superior air throw, optimum performance and durability. So, switch on an Anchor Fans and simply cool off.



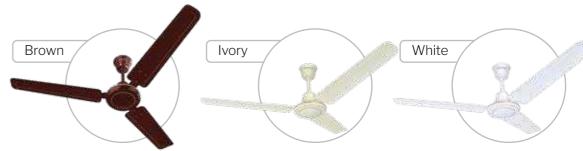
●● 172 173 ●●



Introducing COOL KING and STRELLA DLX ceiling fans with stylish design, reliable technology and power coated finish for longer life, from the house of Anchor by Panasonic. Aesthetically appealing motor housing and decorative bottom cover, which gives better strength and heat dissipation. Ribbed blades improves the air thrust, with high-speed motor for consistent air delivery.

## **COOL KING**





Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Top Cover	Bottom Cover	Blade
75W	1400	300	240	Aluminium	Aluminium	Aluminium
80W	1200	370	200	Aluminium	Aluminium	Aluminium
55W	900	440	130	Aluminium	Aluminium	Aluminium

● 174 175 ● ●

## **EXHAUST & VENTILATION RANGE**



- Aesthetic good looks, powerful motor and in built front plate helps eliminate all unwanted colours and smoke
- Equipped with super-efficient motor for durability and designed with sleek aesthetics
- Thermal overload protection for extra safety
- Safety guard for both sides
- Exceptionally silent operation
- Easily removable front for cleaning



Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Available Colours
25W	150	2100	240	White, Ivory, Stainless Steel
22W	100	2500	90	White, Ivory, Stainless Steel



- Aesthetic good looks, powerful motor and in built front plate helps eliminate all unwanted colours and smoke
- Equipped with super-efficient motor for durability and designed with sleek aesthetics
- Thermal overload protection for extra safety
- Safety guard for both sides
- Exceptionally silent operation
- Easily removable front for cleaning



Power	Sweep	Speed	Air Delivery	Available
Consumption (W)	(mm)	(rpm)	(m³/min)	Colours
25W	150	2100	240	White, Ivory, Black

## **Smart Air**

- High performance motor
- Suitable for window and wall mounted installation
- Compact design
- Automatic back louvers
- Thermal overload protection for extra safety



Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Available Colours
45W	250	1250	750	White, Black
40W	200	1300	550	White, Black
35W	150	1350	300	White, Black

## **Smart Air**



- High speed motor
- Suitable for window and wall mounted installation
- Compact design
- Automatic back louvers
- Thermal overload protector for extra safety



Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Available Colours
60W	200	1900	765	White, Black
40W	150	2500	500	White, Black

## **EXHAUST & VENTILATION RANGE**

## **Axis Air**

- Super efficient motor for better suction
- Thermal overload protection for extra safety
- Safety guard on front side
- Silent operation
- Easy removable front for cleaning



Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Available Colours
20W	150	2100	320	White, Ivory, Stainless Steel
15W	100	2500	98	White, Ivory, Stainless Steel

## Koolair

- Light weight
- Rust proof body and blades
- Self opening louvers
- Thermal overload protection for extra safety



Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Available Colours
40W	250	1250	820	White, Ivory
40W	200	1300	550	White, Ivory
35W	150	1350	300	White, Ivory









- High performance motor with a compact design
- Sturdy metal body with double ball bearings
- Safety guard for protection from foreign particles
- Thermal overload protector for extra safety

	Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Colour
Anmol	65W	300	1300	1750	Metallic Grey
Deluxe	45W	230	1350	750	Metallic Grey
Anmol	60W	300	1300	1250	Metallic Grey
	40W	230	1350	500	Metallic Grey
	35W	150	2500	500	Metallic Grey



- IP55 Protection
- Durable epoxy powder coated finish
- Sturdy metal body with double ball bearings
- Efficient heavy duty motor with double ball bearings
- Thermal overload protector for extra safety



Power Consumption (W)	Sweep (mm)	Speed (rpm)	Air Delivery (m³/min)	Available Colours
410W	450	1400	6120	Grey
160W	380	1400	3250	Grey
90W	300	1400	1710	Grey