

# CIRCUIT PROTECTION TPN DISTRIBUTION BOARDS



- Three Phase Distribution Boards
- Bidirectional MCB
- Bidirectional RCD
- Bidirectional RCBO
- Verical Busbar RCBO
- AFDD
- Surge & Lighting Arrestors
- Accessories



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TPNR16-SD



## INTRODUCTION

The MCG TPN Distribution Boards have been designed with key features for ease of installation. All units are manufactured to the highest quality and meet all current standards.

### Our Product Features

- Complete with fitted pre-wired 125A 4 pole incoming isolator
- Robust steel polyester powder coated to RAL 7035
- Reversible hanging latching door - single person installation
- Top & bottom gland plates included
- 4 - 16 free way options
- Accessories available including TPN to IP conversion kit
- Compatible with the full range of SPD surge / lightning arresters
- BS EN 61439-3



All circuit protection devices are manufactured in accordance with current standards and are independently tested.



TPNR4-SD



Retained Screws throughout



Door Frame Slots and Tabs



Protected spare Earth Studs



4 Pole 125A Isolator [supplied]



Earth Strap

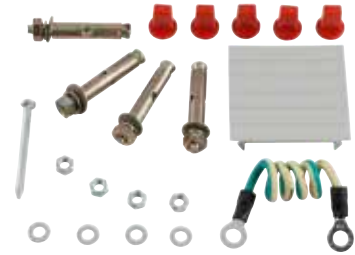
## THREE PHASE DISTRIBUTION BOARDS

### TPN DISTRIBUTION BOARDS

**Features:**

- Complete with fitted pre-wired 125A 4 pole incoming isolator
- Robust steel polyester powder coated to RAL 7035
- Reversible hanging latching door - single person installation
- Top & bottom gland plates included
- 4 - 16 free way options
- Accessories available including TPN to IP conversion kit
- Compatible with the full range of SPD surge / lightning arresters
- BS EN 61439-3

Code	Ref No	Free Ways	Incomer Included	IP Rating	Height [mm]	Width [mm]	Depth [mm]
1993-9285	TPNR4-SD	4	125A	IP40	457	405	95.2
1993-9288	TPNR6-SD	6	125A	IP40	511	405	95.2
1993-9291	TPNR8-SD	8	125A	IP40	565	405	95.2
2072-6833	TPNR12-SD	12	125A	IP40	673	405	95.2
2234-1229	TPNR14-SD	14	125A	IP40	727	405	95.2
2234-1232	TPNR16-SD	16	125A	IP40	781	405	95.2



Fixing Kit - Included



Top & Bottom Gland Plates



Pre-punched Gland Plates



Installation Triangle



Keyhole Fixing



Angled & Numbered Earth Terminals



Neutral Bar Cover

## THREE PHASE DISTRIBUTION BOARDS ACCESSORIES

### BLANKING MODULES & PLUGS



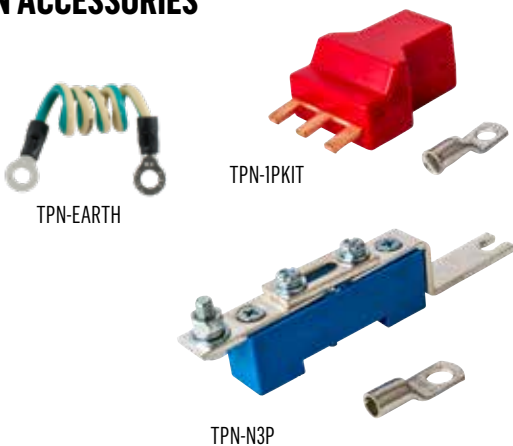
TPN-PLUG

BMIP

TPN-BM

Code	Ref No	Pack Qty	Material	Type	Width [mm]
2020-1194	BMIP	1	Plastic	Din Rail	18
1488-7189	TPN-BM	5	Plastic	Clip	54
1488-7198	TPN-PLUG	5	Plastic	Clip	-

### TPN ACCESSORIES



TPN-EARTH

TPN-IPKIT

TPN-N3P

Code	Ref No	Description	Pack Qty
1488-7186	TPN-IPKIT	Three Phase to Single Phase Conversion Kit	1
1488-7195	TPN-N3P	Neutral Connection Kit for the Incomer	1
1488-7192	TPN-EARTH	Flexible Earth Strap	1



**Do you require SPD  
Devices for your Three  
Phase board?**

See page 9

## CIRCUIT PROTECTION

### ISOLATOR SWITCH

**Features:**

- Suitable for isolation to IEC 60947-3
- Insulated DIN rail clips
- Ergonomic hand grip for easy installation
- Red switch handle for rapid identification



125A4PI

Code	Ref No	Amp	Pole
2123-6860	125A4PI	125A	4

### RCD

**Features:**

- Bidirectional
- Insulated din rail clips
- Type A & B options
- 2 & 4 Pole options
- Multiple ma sensitivity options
- Multiple amp over current ratings
- Time delay 'S' options
- Test button
- Fault tripping indication window



63A2P30BT

Code	Ref No	Type	mA	Time Delay	Amps	Pole	Short Circuit Rating
<b>Type B 30mA</b>							
2577-8737	63A4P30BT	B	30	-	63A	4	10kA
<b>Type A 4P 30mA</b>							
2579-4523	25A4P30AT	A	30	-	25A	4	6kA
2579-4547	40A4P30AT	A	30	-	40A	4	6kA
2579-4607	63A4P30AT	A	30	-	63A	4	6kA
2579-4613	80A4P30AT	A	30	-	80A	4	6kA
2579-4589	100A4P30AT	A	30	-	100A	4	6kA
<b>Type A 4P 100mA</b>							
2647-6999	80A4P100AT	A	30	-	80A	4	6kA
2579-4577	100A4P100AT	A	100	-	100A	4	6kA
2579-4583	100A4P300AT	A	100	-	100A	4	6kA

### RCD TIME DELAY

**Features:**

- Bidirectional
- Type 's'
- 200-300MS time delay
- Insulated DIN rail clips
- Test button
- Fault tripping indication window



25A2P100ATD

Code	Ref No	Type	mA	Time Delay ms	Amps	Pole	Short Circuit Rating
<b>4P 100mA</b>							
2579-4580	100A4P100ATD	A	100	200 - 300ms	100A	4	6kA
<b>4P 300mA</b>							
2579-4586	100A4P300ATD	A	300	200 - 300ms	100A	4	6kA

## CIRCUIT PROTECTION

### MCB

#### Features:

- Bidirectional
- Insulated DIN rail clips
- Ergonomic hand grip
- Multiple trip curve options
- Multiple pole options
- 6kA & 10kA options
- 1-3 Pole



1A1PB10



20A2PD10



40A3PD10

Code	Ref No	Amps	Pole	Trip Curve	No. of Modules	Short Circuit Rating
<b>1P B Curve</b>						
2123-6899	1A1PB10	1A	1P	B	1	10kA
2123-6959	2A1PB10	2A	1P	B	1	10kA
2123-7037	4A1PB10	4A	1P	B	1	10kA
2123-7112	6A1PB10	6A	1P	B	1	10kA
2123-6824	10A1PB10	10A	1P	B	1	10kA
2123-6863	16A1PB10	16A	1P	B	1	10kA
2123-6905	20A1PB10	20A	1P	B	1	10kA
2123-6938	25A1PB10	25A	1P	B	1	10kA
2123-6965	32A1PB10	32A	1P	B	1	10kA
2123-6998	40A1PB10	40A	1P	B	1	10kA
2123-7043	50A1PB10	50A	1P	B	1	10kA
2123-7076	63A1PB10	63A	1P	B	1	10kA
<b>1P C Curve</b>						
2123-6902	1A1PC10	1A	1P	C	1	10kA
2123-6962	2A1PC10	2A	1P	C	1	10kA
2123-7040	4A1PC10	4A	1P	C	1	10kA
2123-7118	6A1PC10	6A	1P	C	1	10kA
2123-6830	10A1PC10	10A	1P	C	1	10kA
2123-6869	16A1PC10	16A	1P	C	1	10kA
2123-6911	20A1PC10	20A	1P	C	1	10kA
2123-6941	25A1PC10	25A	1P	C	1	10kA
2123-6971	32A1PC10	32A	1P	C	1	10kA
2123-7004	40A1PC10	40A	1P	C	1	10kA
2123-7049	50A1PC10	50A	1P	C	1	10kA
2123-7082	63A1PC10	63A	1P	C	1	10kA
<b>1P D Curve</b>						
2123-7124	6A1PD10	6A	1P	D	1	10kA
2123-6836	10A1PD10	10A	1P	D	1	10kA
2123-6875	16A1PD10	16A	1P	D	1	10kA
2123-6917	20A1PD10	20A	1P	D	1	10kA
2123-6944	25A1PD10	25A	1P	D	1	10kA
2123-6977	32A1PD10	32A	1P	D	1	10kA
2123-7010	40A1PD10	40A	1P	D	1	10kA
2123-7055	50A1PD10	50A	1P	D	1	10kA
2123-7088	63A1PD10	63A	1P	D	1	10kA

Code	Ref No	Amps	Pole	Trip Curve	No. of Modules	Short Circuit Rating
<b>2P D Curve</b>						
2123-7133	6A2PD10	6A	2P	D	2	10kA
2123-6845	10A2PD10	10A	2P	D	2	10kA
2123-6884	16A2PD10	16A	2P	D	2	10kA
2123-6926	20A2PD10	20A	2P	D	2	10kA
2123-6986	32A2PD10	32A	2P	D	2	10kA
2123-7022	40A2PD10	40A	2P	D	2	10kA
2123-7064	50A2PD10	50A	2P	D	2	10kA
2123-7097	63A2PD10	63A	2P	D	2	10kA
<b>3P B Curve</b>						
2123-7136	6A3PB10	6A	3P	B	3	10kA
2123-6848	103PB10	10A	3P	B	3	10kA
2123-6887	16A3PB10	16A	3P	B	3	10kA
2123-6929	20A3PB10	20A	3P	B	3	10kA
2123-6989	32A3PB10	32A	3P	B	3	10kA
2123-7025	40A3PB10	40A	3P	B	3	10kA
2123-7067	50A3PB10	50A	3P	B	3	10kA
2123-7100	63A3PB10	63A	3P	B	3	10kA
<b>3P C Curve</b>						
2123-7139	6A3PC10	6A	3P	C	3	10kA
2123-6851	103PC10	10A	3P	C	3	10kA
2123-6890	16A3PC10	16A	3P	C	3	10kA
2123-6932	20A3PC10	20A	3P	C	3	10kA
2123-6992	32A3PC10	32A	3P	C	3	10kA
2123-7028	40A3PC10	40A	3P	C	3	10kA
2123-7070	50A3PC10	50A	3P	C	3	10kA
2123-7103	63A3PC10	63A	3P	C	3	10kA
<b>3P D Curve</b>						
2123-7142	6A3PD10	6A	3P	D	3	10kA
2123-6854	103PD10	10A	3P	D	3	10kA
2123-6893	16A3PD10	16A	3P	D	3	10kA
2123-6935	20A3PD10	20A	3P	D	3	10kA
2123-6995	32A3PD10	32A	3P	D	3	10kA
2123-7031	40A3PD10	40A	3P	D	3	10kA
2123-7073	50A3PD10	50A	3P	D	3	10kA
2123-7106	63A3PD10	63A	3P	D	3	10kA

## CIRCUIT PROTECTION

### RCBO

- Correct orientation for **vertical busbar**
- Single and triple module options
- Positive contact indication
- B & C trip curve options
- 10kA rated
- Test button

Code	Ref No	Type	mA	Amps	Pole	Trip Curve	Body Type	Number of Modules	Short Circuit Rating
<b>1P+N B Curve</b>									
2579-4565	6A2P30BSMTP	A	30	6A	1P+N	B	Standard	1	10kA
2579-4496	10A2P30BSMTP	A	30	10A	1P+N	B	Standard	1	10kA
2579-4502	16A2P30BSMTP	A	30	16A	1P+N	B	Standard	1	10kA
2579-4511	20A2P30BSMTP	A	30	20A	1P+N	B	Standard	1	10kA
2579-4526	32A2P30BSMTP	A	30	32A	1P+N	B	Standard	1	10kA
2579-4538	40A2P30BSMTP	A	30	40A	1P+N	B	Standard	1	10kA
2579-4550	50A2P30BSMTP	A	30	50A	1P+N	B	Standard	1	10kA
<b>1P+N C Curve</b>									
2579-4568	6A2P30CSMTP	A	30	6A	1P+N	C	Standard	1	10kA
2579-4499	10A2P30CSMTP	A	30	10A	1P+N	C	Standard	1	10kA
2579-4505	16A2P30CSMTP	A	30	16A	1P+N	C	Standard	1	10kA
2579-4514	20A2P30CSMTP	A	30	20A	1P+N	C	Standard	1	10kA
2579-4529	32A2P30CSMTP	A	30	32A	1P+N	C	Standard	1	10kA
2579-4541	40A2P30CSMTP	A	30	40A	1P+N	C	Standard	1	10kA
2579-4553	50A2P30CSMTP	A	30	50A	1P+N	C	Standard	1	10kA
<b>3P+N C Curve</b>									
2579-4571	6A3P30CTPTP	A	30	6A	3P+N	C	Standard	3	10kA
2646-1396	10A3P30CTPTP	A	30	10A	3P+N	C	Standard	3	10kA
2579-4508	16A3P30CTPTP	A	30	16A	3P+N	C	Standard	3	10kA
2579-4517	20A3P30CTPTP	A	30	20A	3P+N	C	Standard	3	10kA
2579-4532	32A3P30CTPTP	A	30	32A	3P+N	C	Standard	3	10kA
2579-4544	40A3P30CTPTP	A	30	40A	3P+N	C	Standard	3	10kA
2579-4556	50A3P30CTPTP	A	30	50A	3P+N	C	Standard	3	10kA
2579-4562	63A3P30CTPTP	A	30	63A	3P+N	C	Standard	3	10kA



32A2P30CSMTP



63A3P30CTPTP



Three Phase Distribution Board showing the correct orientated single and three module RCBO

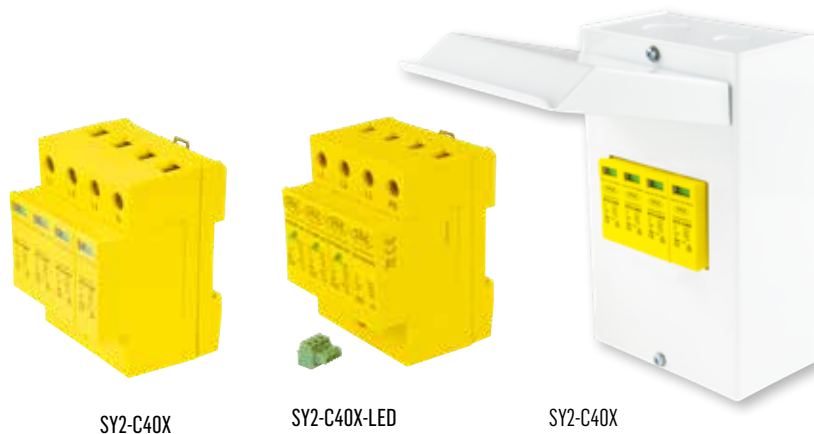
## SURGE PROTECTION DEVICES

### SURGE ARRESTERS

- Specialist in the industry for over 40 years
- Protects sensitive electronic equipment
- Replaceable plug module
- 18th edition amendment
- 10 Year manufacturing defect warranty
- End of working life indication
- BS 7671 edition 18 compliant
- AC & DC options



On all SPD Ltd products only



SY2-C40X

SY2-C40X-LED

SY2-C40X

### SURGE ARRESTERS T2 + T3 AC

Code	Ref No	Phase	Type	SPD Modules	Metal Enclosure Included	SPD Poles	MCB	Cable Kit Included	Max Discharge Current Module	Suitable for Earth Systems	
TPN Devices											
2433-7000	SY2-C40X	TPN	T2 + T3	4	-	4	-	-	40kA	-	TN-S TN-C-S
2441-3887	SY2-C40XME	TPN	T2 + T3	4	ME4S	4	-	-	40kA	-	TN-S TN-C-S
2606-4946	SY2-C40X-LED	TPN	T2 + T3	4	-	4	-	-	40kA	TT	TN-S TN-C-S

### LIGHTNING SURGE ARRESTERS T1 + T2 + T3 AC

Code	Ref No	Phase	Type	SPD Modules	SPD Poles	Max Discharge Current Module	Suitable for Earth Systems	
2462-7880	10020/4	TPN	T1 + T2 + T3	4	4	50kA	-	TN-S TN-C-S
2562-0751	SY123/50KA4P	TPN	T1 + T2 + T3	4	4	50kA	TT	TN-S TN-C-S



SY123/50KA4P



10811LED

Check out our Basics of SPD Selection video on YouTube

Please scan the QR code





## SURGE PROTECTION DEVICES

### SURGE ARRESTERS T2 PV SOLAR SYSTEMS

Code	Ref No	Phase	Type	SPD Modules	SPD Poles	Rating
2524-903	SPD PV600	DC	T2	3	[+ -]	600V DC
2524-900	SPD PV1000	DC	T2	3	[+ -]	1000V DC



SPD PV600



SPD PV1000

### LIGHTNING SURGE ARRESTERS T1 + T2 PV SOLAR SYSTEMS

Code	Ref No	Phase	Type	SPD Modules	SPD Poles	Rating
2764-7161	LSPDPV1000	DC	T1 + T2	3	[+ -]	1000V DC



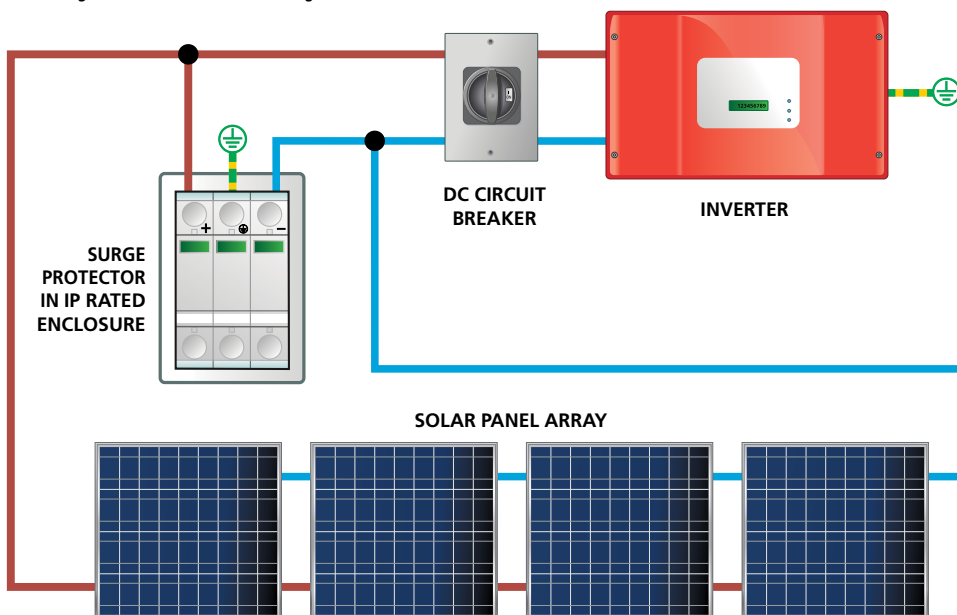
**Please Note:**

Other devices are also available for specific protection purposes such as:

- Telephones/Modems/Fax
- Coaxial
- CCTV
- Satellite
- Fire Alarms

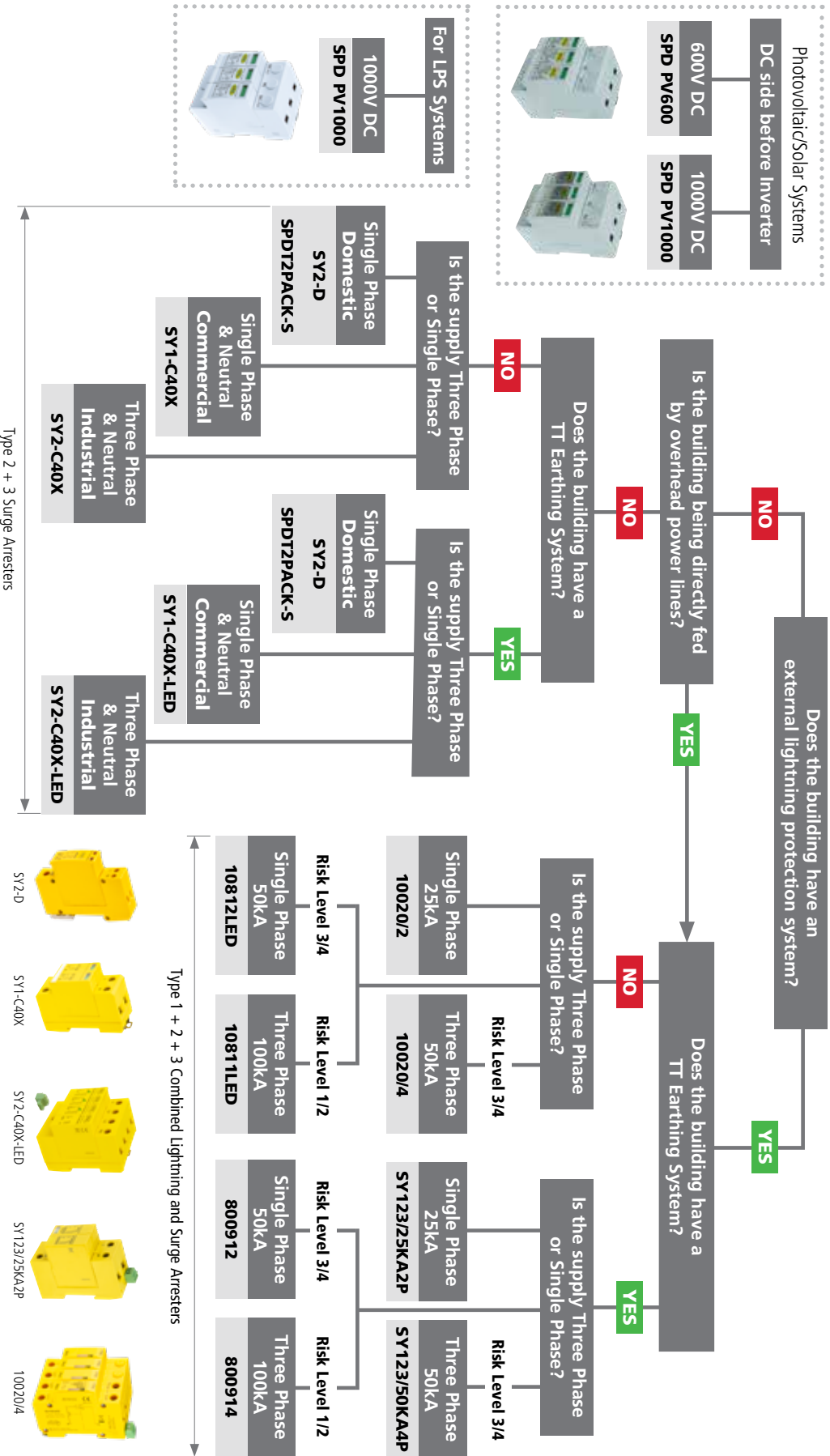
### SURGE PROTECTION DEVICE IN A PHOTOVOLTAIC/SOLAR PANEL SYSTEM

For fitting a 600V DC or 1000V DC Surge Protection Device.



## SURGE ARRESTER DEVICES SELECTION CHART

### WHICH SURGE PROTECTION DEVICE DO I NEED?



### USE THIS CHART TO CHOOSE YOUR DEVICE

<b>Main Incoming Position - Type 1</b> PROTECTION AGAINST DIRECT LIGHTNING CURRENTS [LIGHTNING CURRENT ARRESTER] - 10/350µs	<b>Sub Dist. Board Position - Type 2</b> PROTECTION AGAINST INDIRECT LIGHTNING EFFECTS [SURGE ARRESTER] - 8/20µs	<b>Final Sub Circuit - Type 3</b> PROTECTION AGAINST SWITCHING OVERVOLTAGES [SURGE ARRESTER] - 8/20µs
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**Please Note:** Devices are also available for specific protection, such as: Telephone/Fax/Modems, Co-axial/BNC/CCTV/Satellite, Power over Ethernet etc., as per BS7671:2018 - Further details on request.





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MCGCAT02



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