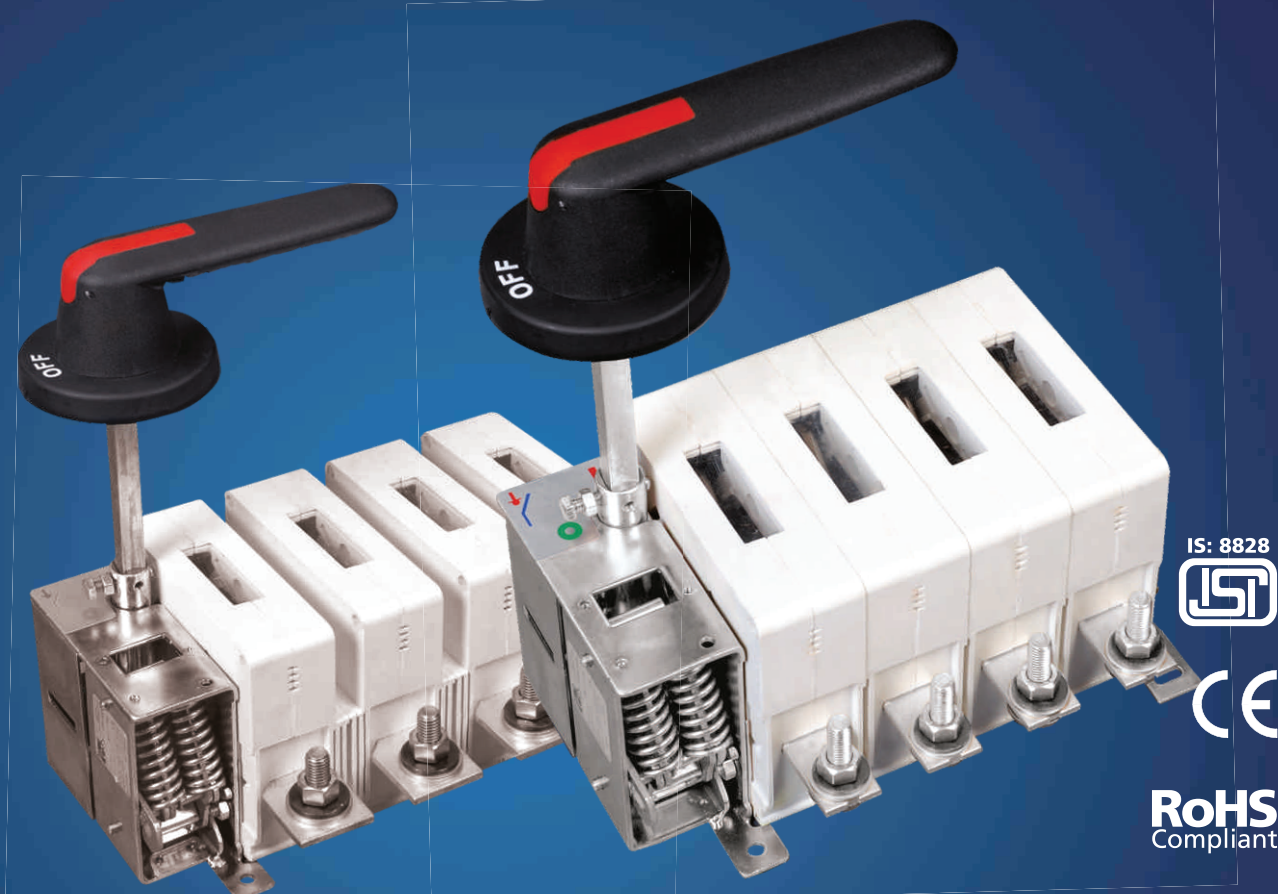


ПЕРЕКЛЮЧАТЕЛИ НАГРУЗКИ И РАЗЪЕДИНИТЕЛИ



Переключатели-разъединители нагрузки предназначены для применения в шкафах систем распределения энергии, включая ГРЩ, комплектных трансформаторных подстанциях и другом низковольтном оборудовании распределения и передачи электроэнергии.

Переключатели имеют конструкцию с индивидуальным полюсом для каждой фазы, что позволяет собрать комбинацию от 1-го до 8-ми полюсов. Каждый полюс выключателя нагрузки, представляет собой отдельный модуль с вертикально включающимися контактными группами.

УНИКАЛЬНЫЙ МЕХАНИЗМ КОНТАКТОВ

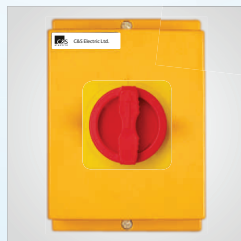
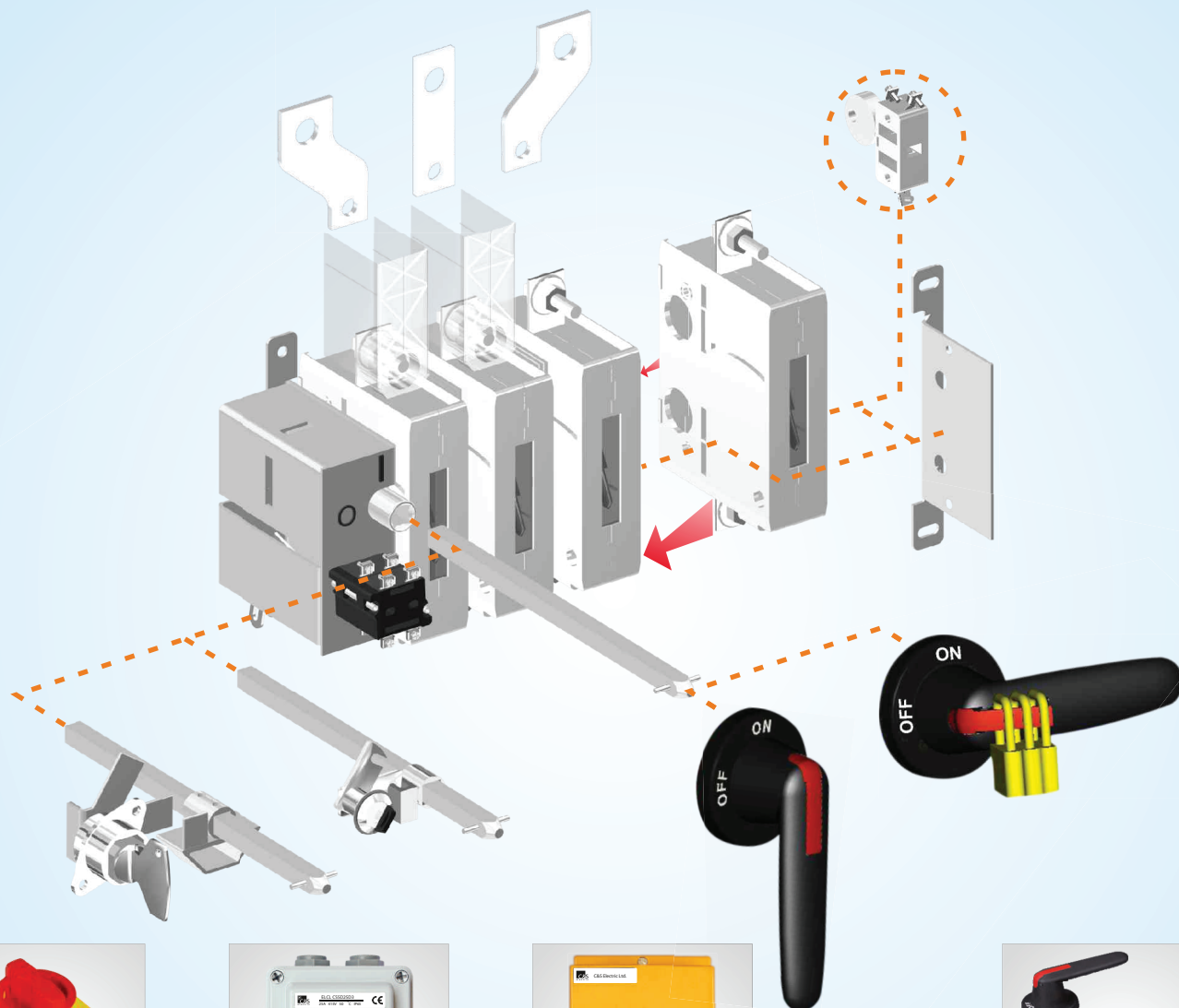
В переключателях-разъединителях нагрузки с номинальным током 200А и выше применяется ножевой контактный механизм, который использует принцип магнитного притяжения в магнитопроводах на подвижных контактах. С увеличением силы тока автоматически увеличивается и контактное усилие, обеспечивая надежный контакт. Таким образом, достигается пониженная температура контактов, что увеличивает электрическую долговечность изделия. Для включения (выключения) переключателей-разъединителей нагрузки применяется пружинный привод мгновенного действия, что позволяет размыкать контакты с большим усилием и высокой скоростью, привод при необходимости, возможно, самостоятельно менять местами с полюсами - изменяя общую конфигурацию.

Специальная форма неподвижных контактов с применением дугогасительных камер не допускает дугообразования, искрения на токопроводящих поверхностях, что дополнительно гарантирует надежность.

При каждой коммутации ножевые контакты самоочищаются, что оптимально применимо для включений двигателей и конденсаторных установок, а так же для использования в таких отраслях промышленности, где повышенное загрязнение среды, как например химические заводы, цементные заводы, металлургические предприятия и т.п.

ЛЕГКАЯ УСТАНОВКА

Переключатели-разъединители нагрузки комплектуются съемной управляющей рукояткой и по заказу поставляются штоки разной длины. С помощью рукоятки и штока в сборе регулируется необходимая глубина установки переключателя в ячейке. Что позволяет устанавливать один и тот же переключатель -разъединитель на различную глубину, без каких либо усилий и дополнительных устройств. Рукоятка с 4-хгранным отверстием позволяет изменить направление поворота переключателя внутри ячейки на 90 и 180 градусов в любую сторону без переделки наружной двери. По заказу переключатели-разъединители нагрузки могут поставляться с увеличенными межполюсными расстояниями. Все это приводит к экономии времени, а также повышает простоту и количество возможных вариантов установки, и снижает стоимость монтажных работ.



Internationally Endorsed

Tested & Accepted
World over

VMtec Switch Disconnectors have been tested for their conformity to International as well as Indian Standards at various independent Laboratories like - ASTA for conformity to International Standards – IEC 60947 - 3 and CPRI, ERDA for conformity to Indian Standards IS 13947 - 3. These also conform to the safety regulations adopted in the European Union and carry the CE marking.

OEMs and panel assemblers can be re-assured that the design is being used and exported to many countries world over.

An ISO 9001 certified manufacturing facilities gives the assurance of quality & consistency of these switches

CPRI

ERDA

CE

ASTA

Flexible Design

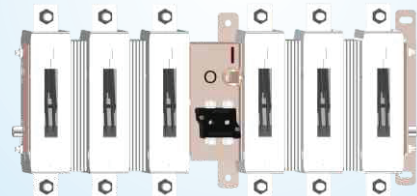
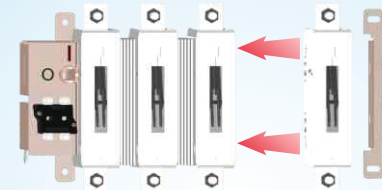
Modular yet reliable
construction

VMtec Switch Disconnectors have a modular assembly for operating mechanism and pole. Contact system, placed in separate housing for individual phase poles, are joined together to form a switch with multi-pole formation upto 8 poles.

This arrangement offers flexibility of placing mechanism in between the poles. 63A-800A, switches with side operated mechanism are also offered.

Every pole has 100% rating and operates with same reliability. As each pole is independent of the other, its maintenance or replacement is easy & economical in the event of damage.

Switches can hence be ordered as per installation requirement 2 pole for DC; 3 pole for 3 phase, 3 wire system; 4 pole for 3 phase, 4 wire system or 6 pole for Star Delta motors.



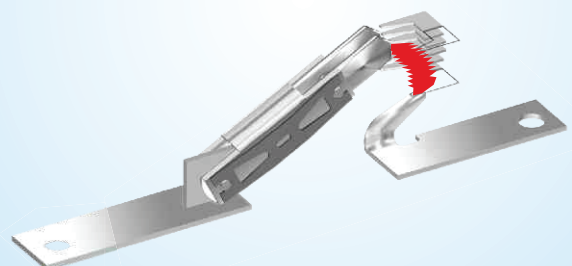
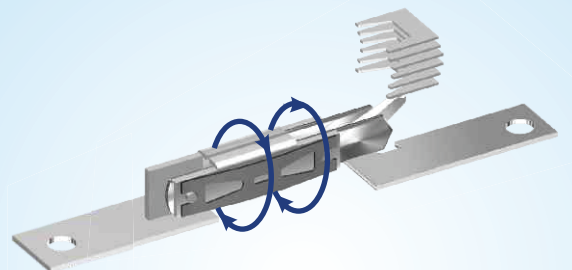
Unique Contact Mechanism

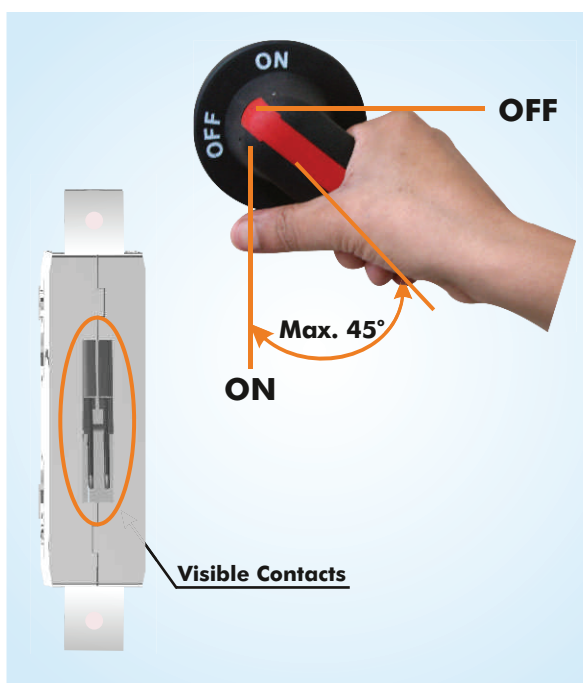
Efficient Switching
& Long life

Switch Disconnectors of rating 200A and above employ unique Knife Contact Mechanism, which uses magnetic attraction principle in iron circuit on the moving contacts. As current increases, automatically the contact force too increases, ensuring - good contacts at all times, high making and breaking capacity upto 690V and low temperature rise leading to long electrical life.

The special form of fixed contacts results in separate arcing and current carrying surfaces. It again ensures that current carrying surface remains unaffected by arcing, maintaining identical contact pressure and enhancing electrical life. Special shape of fixed contacts also help blow out the Arc into Arc - Chute where it is swiftly extinguished under controlled conditions, safely.

During each switching, the knife contacts clean itself. This makes them perfectly suited for Indian conditions in general and for high pollution and corrosive conditions as in Chemical Plants, Cement Plants, Steel Plants, etc., including applications like Motors and capacitor switching.





Convenient, Swift
& Economical

These time saving features increase the ease and flexibility of installation and also reduce installation cost.

Flexibility to suit Application

Extended terminals allow for liberal termination or termination of large number of cables with higher clearances. Shrouds encase the terminals so that no falling hardware may get embedded between the terminals resulting in flashovers.

Safety Built-in

Door interlocking prevents opening in the ON position, guarding the operator against an accidental mishap. As a standard upto 3 padlocks are provided in the OFF position to prevent closing the circuit during maintenance work. They can also be provided in the ON position. Using a suitable gasket alongwith handle enhances ingress protection level to IP 54.

ПЕРЕКЛЮЧАТЕЛИ НАГРУЗКИ И РАЗЪЕДИНИТЕЛИ



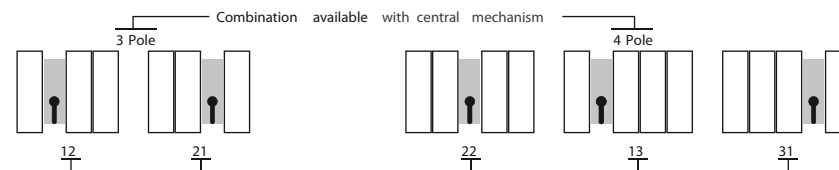
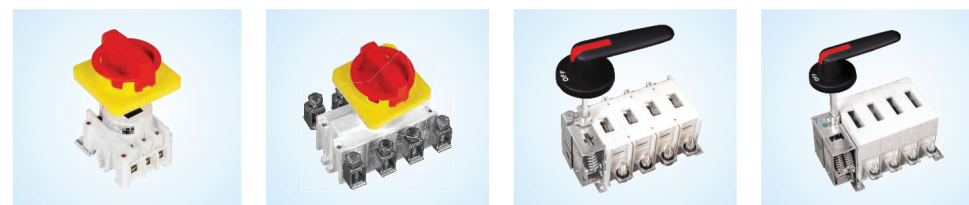
Common Characteristics

Conformity to Standards	-	IEC 60947-3 / IS 13947-3
Rated Operational Voltage (Ue)	V	415
Rated Operational Frequency	Hz	50 / 60
Suitability for Isolation	-	YES
Pollution Degree as per IEC / IS	-	3
Ambient / Cubicle Service Temp.	°C	55
IP Level after mounting	-	IP 54
Number of Poles (4th Pole always 100% rated in 4 Pole switches)	-	3/4P*

*Other Pole configuration available on request

Replace ● with 3 in case of 3 pole or with 4 in case of 4 pole

Parameters		
Type - VM with side mechanism		
Type - VM with central mechanism, 3 pole		
Type - VM with central mechanism, 4 pole		
Rated insulation voltage and rated operational voltage AC20 / DC20		V
Dielectric strength	50 Hz, 1min.	KV
Rated impulse withstand voltage		KV
Rated thermal current and rated operational current AC20 / DC20 / ambient 40°C	Open Execution	A
/ ambient 40°C	Enclosure	A
/ ambient 60°C	Enclosure	A
With minimum conductor cross section	Cu	mm ²
Rated operational current, AC-21A	up to 415V	A
	440-690V	A
	1000V	A
Rated operational current, AC-22A	up to 415V	A
	440-500V	A
	690V	A
	1000V	A
Rated operational current, AC-23A	up to 415V	A
	440V	A
	500V	A
	690V	A
	1000V	A
Rated operational current / poles in series, DC-21A	up to 48V	A
	110V	A
	220V	A
	440V	A
	750V	A
Rated operational current / poles in series, DC-22A	up to 48V	A
	110V	A
	220V	A
	440V	A
	750V	A
Rated operational current / poles in series, DC-23A	up to 48V	A
	110V	A
	220V	A
	440V	A
	750V	A



(replace ■ with)

25A	40A	63A		100A	125A	100A	125A	160A	200A
VM25D ●	VM40D ●	VM63K ●	VM63D ●	VM100D ●	VM125D ●	VM100DM ●	VM125DM ●	VM160DM ●	VM200DM ●
-	-	-	-	-	-	-	-	-	VM200DM ●
-	-	-	-	-	-	-	-	-	VM200DM ●
750	750	750	750	750	750	750	750	750	1000
6	6	6	6	6	6	6	6	6	10
8	8	8	8	8	8	8	8	12	12
32	40	63	63	115	135	115	135	160	250
25	40	63	63	100	125	100	125	160	200
16	25	40	40	63	100	63	100	125	175
6	10	16	16	35	50	-	-	70	95
25	40	63	80	100	125	100	125	160	200
25	40	63	63	100	125	100	125	160	200
-	-	-	-	-	-	-	-	-	200
25	40	63	63	100	125	100	125	160	200
-	-	-	-	-	-	-	125	160	200
-	-	-	-	-	-	100	125	160	200
-	-	-	-	-	-	-	-	-	200
25	40	63	63	100	125	100	125	160	200
20	25	40	40	50	63	60	70	100	200
20	25	32	32	50	63	60	70	100	200
16	25	32	32	40	50	40	50	63	200
-	-	-	-	-	-	-	-	63	125
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
-	-	-	-	-	-	-	-	-	200/4
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
-	-	-	-	-	-	-	-	-	200/4
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
-	-	-	-	-	-	-	-	-	200/4
16/2	16/2	16/2	16/2	16/2	16/2	100/2	125/2	160/2	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/3	16/3	16/3	16/3	16/3	16/3	100/3	125/3	160/3	200/2
16/4	16/4	16/4	16/4	-	-	-	-	-	200/3
16/4	16/4	16/4	16/4	-	-	-	-	-	200/4



Catalogue Reference



Mounting

EABW	Plastic Enclosure, Gray base & Gray cover (25A-63A)
EACL	Plastic Enclosure, Gray base & Yellow cover (25A-63A)
ELCL / ELBL	Aluminum Enclosure, Gray base & Gray cover (16A-125A) (Refer our Enclosed Switch Catalogue for more info.)
E	In Sheet Steel Enclosure
Blank	Without Enclosure



Rating

40	40A
800	800A
2500	2500A



Switch Type

D	Old Series, 25A, 40A, 63A, 100A & 125A
DM	Compact Series, 100 ~ 400A
K	63A, 400A - 3150A, 3 pole
C	Toggle Type 25A - 125A



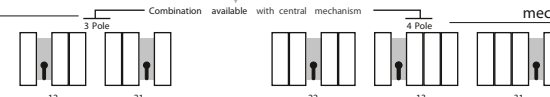
No. of Poles

3	3 Pole
4	4 Pole



Mechanism Type

Blank	Front Operated
SO	Side Operated, 63 - 800A (not applicable for combinations with central mechanism)



Parameters			
Rated operational power, AC-23A	The kW-ratings are accurate for 3 phase 1500 R.P.M. standard asynchronous motors	220-240V	kW
		400-415V	kW
		440V	kW
		500V	kW
		690V	kW
Rated breaking capacity, AC-23A		up to 415V	A
		440V	A
		500V	A
		690V	A
Rated breaking capacity/poles in series, DC-23A		up to 48V	A
		110V	A
		220V	A
		440V	A
		750V	A
Rated conditional (fused) short-circuit current r.m.s. and corresponding cut-off current of the fuse in single-phase test according IEC 269	Cut-off /Back up fuse Rating	50kA	kA
		415V	
		50kA	kA
		500V	
		50kA	kA
		690V	
		100kA	kA
		500V	
Rated short-time withstand current	R.M.S. -value Icw	690V,0.2s	kA
		690V,0.25s	kA
		690V,1s	kA
		690V/500V	kA
Rated short circuit making capacity	Peak value Icm		
Rated capacitor power	The capacitor ratings are limited by the fuse link	400V	kVAR
		415V	kVAR
Power loss / pole	At rated operational current		watt
Mechanical Endurance	Divide by two for operation cycles		Operations
Electrical Endurance	At 0.65 pf	415V	Operations
Weight without accessories	With handle and shaft	3-Pole	kg
		4-Pole	kg
Terminal suitable for cable lug size	Cu- wire suitable for terminal clamp		Sq mm
Terminal tightening torque	Counter torque required		Nm
Operating torque	3-pole switch-disconnector		Nm

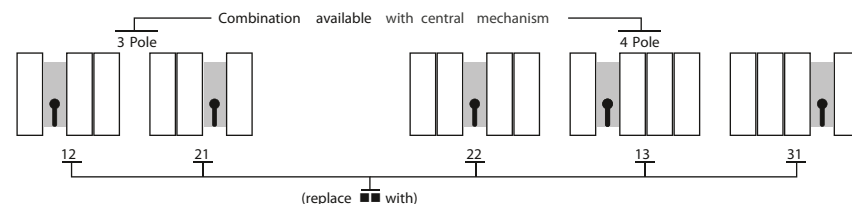
25A	40A	63A		100A	125A	100A	125A	160A	200A
4	5.5	11	11	22	22	22	22	22	55
9	11	22	22	37	45	37	45	45	110
9	11	22	22	37	45	37	45	45	110
9	11	22	22	37	45	37	45	45	132
9	11	15	15	37	45	37	45	45	170
200	320	504	504	800	1000	800	1000	1280	1600
160	200	320	320	400	504	480	560	1280	1600
160	200	256	256	400	504	480	560	1280	1600
128	200	256	256	320	400	320	400	1280	1600
100/2	128/2	180/2	180/2	400/2	500/2	400/2	500/2	640/1	800/2
100/2	128/2	180/2	180/2	400/2	500/2	400/2	500/2	640/2	800/2
100/4	128/4	180/4	180/4	252/4	252/4	252/4	252/4	252/4	800/2
40/4	40/4	40/4	40/4	-	-	-	-	-	800/3
64/8	64/8	-	-	-	-	-	-	-	800/4
6.5	6.5	13	13	16.5	16.5	16.5	16.5	18	36
40/32	40/32	100/80	100/80	125/125	125/125	125/125	125/125	160/160	400/400
6.5	6.5	13	13	16.5	16.5	16.5	16.5	18	36
40/32	40/32	100/80	100/80	125/125	125/125	125/125	125/125	160/160	400/400
4	4	11	11	10	10	10	10	10	48
25/16	25/16	80/63	80/63	63/63	63/63	63/63	63/63	63/63	400/400
-	-	17	17	-	-	-	-	-	48
-	-	100/80	100/80	-	-	-	-	-	400/400
1	1	2	2	5	5	5	5	8	17.5
1	1	2	2	5	5	5	5	8	-
0.5	0.5	1	1	2.5	2.5	2.5	2.5	5	8
0.7	0.7	1.4	1.4	3.6	3.6	3.6	3.6	7	35
10	15	25	25	40	50	40	50	60	90
10	15	25	25	40	50	40	50	60	90
0.6	1.6	2.8	2.8	4	6.3	4	6.3	9	3.5
20000	20000	20000	20000	20000	20000	20000	20000	20000	16 000
5000	5000	5000	5000	5000	5000	5000	5000	1000	1000
0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	1.8	3
0.25	0.25	0.4	0.5	0.5	0.5	0.5	0.5	2.25	3.7
0.75-10	1.5-35	1.5-35	1.5-35	10-70	10-70	10-70	10-70	10-95	8x25
0.8	2	2	5.5	6	8	6	8	8	30...44
1	1	1.2	1.2	2	2	2	2	2.5	8.2

ПЕРЕКЛЮЧАТЕЛИ НАГРУЗКИ И РАЗЪЕДИНИТЕЛИ



Common Characteristics

Conformity to Standards	-	IEC 60947-3 / IS 13947-3
Rated Operational Voltage (Ue)	V	415
Rated Operational Frequency	Hz	50 / 60
Suitability for Isolation	-	YES
Pollution Degree as per IEC / IS	-	3
Ambient / Cubicle Service Temp.	°C	55
IP Level after mounting	-	IP 54
Number of Poles (4th Pole always 100% rated in 4 Pole switches) *Other Pole configuration available on request	-	3P / 4P*



Replace ● with 3 in case of 3 pole or with 4 in case of 4 pole

Parameters			250A	315A
Type - VM with side mechanism			VM250DM ●	VM315DM ●
Type - VM with central mechanism, 3 pole			VM250DM ■■	VM315DM ■■
Type - VM with central mechanism, 4 pole			VM250DM ■■	VM315DM ■■
Rated insulation and rated operational voltage AC20 / DC20	50 Hz 1min.	V	1000	1000
Dielectric strength		KV	10	10
Rated impulse withstand voltage		KV	12	12
Rated thermal current and rated operational current AC20/DC20 / ambient 40°C	Open Execution	A	315	350
/ ambient 40°C	Enclosure	A	270	315
/ ambient 60°C	Enclosure	A	220	260
with minimum conductor cross section	Cu	mm2	120	185
Rated operational current, AC-21A	up to 415V	A	250	315
	440-690V	A	250	315
	1000V	A	250	315
Rated operational current, AC-22A	up to 415V	A	250	315
	440-500V	A	250	315
	690V	A	250	315
	1000V	A	250	315
Rated operational current, AC-23A	up to 415V	A	250	315
	440V	A	250	315
	500V	A	250	315
	690V	A	250	315
	1000V	A	125	125
Rated operational current / poles in series, DC-21A	up to 48V	A	250/2	315/2
	110V	A	250/2	315/2
	220V	A	250/2	315/2
	440V	A	250/3	315/3
	750V	A	250/4	315/4
Rated operational current / poles in series, DC-22A	up to 48V	A	250/2	315/2
	110V	A	250/2	315/2
	220V	A	250/2	315/2
	440V	A	250/3	315/3
	750V	A	250/4	315/4
Rated operational current / poles in series, DC-23A	up to 48V	A	250/2	315/2
	110V	A	250/2	315/2
	220V	A	250/2	315/2
	440V	A	250/3	315/3
	750V	A	250/4	315/4

400A	400A	630A	800A	1000A	1250A	1600A	1800A	2500A	3150A
VM400DM ●	VM400K ●	VM630K ●	VM800K ●	VM1000K ●	VM1250K ●	VM1600K ●	VM1800K ●	VM2500K ●	VM3150K ●
VM400DM ■■	VM400K ■■	VM630K ■■	VM800K ■■	VM1000K ■■	VM1250K ■■	VM1600K ■■	VM1800K ■■	VM2500K ■■	VM3150K ■■
VM400DM ■■	VM400K ■■	VM630K ■■	VM800K ■■	VM1000K ■■	VM1250K ■■	VM1600K ■■	VM1800K ■■	VM2500K ■■	VM3150K ■■
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
10	10	10	10	8	8	8	8	8	8
12	12	12	12	8	8	8	8	8	8
400	500	630	800	1000	1250	1600	1800	2500	3150
400	500	630	720	1000	1250	1600	1800	2300	2600
320	410	500	600	900	1000	1250	1600	1950	2300
2x150	2x150	2x185	2x240	2x(60x5)	2x(80x5)	2x(100x5)	-	4x(100x5)	3x(100x10)
400	400	630	800	1000	1250	1600	1800	2500 ²⁾	3150 ²⁾
400	400	630	800	1000	1250	1600	1800	2500 ²⁾	3150 ²⁾
400	400	630	630	1000	1000	1000	1000	1000 ²⁾	1000 ²⁾
400	400	630	800	1000	1250	1600	1600	1600 ²⁾	1600 ²⁾
400	400	630	800	1000	1250	1600	1600	1600 ²⁾	1600 ²⁾
400	400	630	800	-	-	-	-	-	-
400	400	630	630	-	-	-	-	-	-
400	400	630	720	-	-	-	-	-	-
400	400	590	670	-	-	-	-	-	-
400	400	580	600	-	-	-	-	-	-
350	350	350	350	-	-	-	-	-	-
125 ²⁾	125 ²⁾	150 ²⁾	150 ²⁾	-	-	-	-	-	-
400/2	400/2	630/1	800/1	1000/1	1250/1	1600/1	1800/1	-	-
400/2	400/2	630/2	800/2	1000/2	1250/2	1600/2	1800/2	-	-
400/2	400/2	630/2	800/2	1000/3	1250/3	1600/3	1800/3	-	-
400/3	400/3	630/3	800/3	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
400/1	400/1	630/1	800/1	-	-	-	-	-	-
400/2	400/2	630/2	800/2	-	-	-	-	-	-
400/2	400/2	630/2	800/2	-	-	-	-	-	-
400/3	400/3	630/3	800/3	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
400/1	400/1	630/1	800/1	-	-	-	-	-	-
400/2	400/2	630/2	800/2	-	-	-	-	-	-
400/2	400/2	630/2	630/2	-	-	-	-	-	-
400/3	400/3	400/3	400/3	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

2) IEC -947-3, utilization category B , infrequent operation



ПЕРЕКЛЮЧАТЕЛИ НАГРУЗКИ И РАЗЪЕДИНИТЕЛИ



Parameters				250A	315A
Rated operational power, AC-23A	The kW-ratings are accurate for 3 phase 1500 R.P.M. standard asynchronous motors.	220-240V	kW	75	90
		400-415V	kW	132	160
		440V	kW	132	160
		500V	kW	160	200
		690V	kW	200	250
Rated breaking capacity, AC-23A		up to 415V	A	2000	2520
		440V	A	2000	2520
		500V	A	2000	2520
		690V	A	2000	2520
Rated breaking capacity/poles in series, DC-23A		up to 48V	A	1000/2	1260/2
		110V	A	1000/2	1260/2
		220V	A	1000/2	1260/2
		440V	A	1000/3	1260/3
		750V	A	1000/4	1260/4
Rated conditional(fused) short-circuit current r.m.s. and corresponding cut-off current of the fuse in single-phase test according IEC 269	Cut-off /Back up fuse Rating	50kA	kA	36	36
		415V		400/400	400/400
		50kA	kA	36	36
		500V		400/400	400/400
		50kA	kA	48	48
		690V		400/400	400/400
		100kA	kA	48	48
		500V		400/400	400/400
Rated short-time withstand current	R.M.S. -value Icw	690V,0.2s	kA	17.5	17.5
		690V,0.25s	kA	-	-
		690V,1s	kA	8	8
Rated short circuit making capacity	Peak value Icm	690V/500V	kA	35	35
Rated capacitor power	The capacitor ratings are limited by the fuse link	400V	kVAR	110	140
		415V	kVAR	110	140
Power loss / pole	at rated operational current		w	5.5	8.5
Mechanical Endurance	Divide by two for operation cycles		Operations	16 000	16 000
Electrical Endurance	At 0.65 pf	415V	Operations	1000	1000
Weight without accessories	With handle and shaft	3-Pole	kg	3	3
		4-Pole	kg	3.7	3.7
Terminal suitable for cable lug size	Cu- wire suitable for terminal clamp		Sq mm	10x30	10x30
Terminal tightening torque	Counter torque required		Nm	30...44	30...44
Operating torque	3-pole switch-disconnector		Nm	8.2	8.2

400A	400A	630A	800A	1000A	1250A	1600A	1800A	2500A	3150A
132	132	180	200	250	250	250	250	250	250
200	200	315	355	400	400	400	400	400	400
315	315	355	355	400	400	400	400	400	400
315	355	400	450	450	450	450	450	450	
315	315	355	355	-	-	-	-	-	-
3200	4000	5040	5760	-	-	-	-	6400	6400
3200	4000	4720	5360	-	-	-	-	6400	6400
3200	4000	4640	4800	-	-	-	-	6400	6400
2800	2800	2800	2800	2500 ³⁾	2500 ³⁾	2500 ³⁾	-	4800 ⁴⁾	4800 ⁴⁾
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
40	42	63	63	105	105	105	105	140	140
400/400	500/500	630/800	630/800	-	-	-	-	-	-
40	42	63	63	105	105	105	105	140	140
400/400	500/500	500/500	630/800	-	-	-	-	-	-
40	54	70	70	105	105	105	105	140	140
400/400	500/500	630/800	630/800	-	-	-	-	-	-
48	54	70	70	105	105	105	105	105	105
400/400	500/500	630/800	630/800	-	-	-	-	-	-
-	-	38	38	-	-	-	-	-	-
-	31	-	-	56 ⁵⁾	56 ⁵⁾	56 ⁵⁾	56 ⁵⁾	-	-
12	17	17	17	50 ⁵⁾	50 ⁵⁾	50 ⁵⁾	50 ⁵⁾	80 ⁵⁾	80 ⁵⁾
35	65	80	80	105	105	105	105	105/140	105/140
180	250	300	330	-	-	-	-	-	-
180	250	300	330	-	-	-	-	-	-
12	13	22	40	27	40	67	-	90	140
10 000	10 000	10 000	10 000	6 000	6 000	6000	6000	1200	1200
1000	1000	500	500	500	500	500	500	100	100
3.3	5.2	6.2	6.2	16.3	16.3	17.5	17.5	37	37
4	6.4	7.6	7.6	20.5	20.5	22.5	22.5	47	47
10x40	10x40	12x40	12x40	12x60	12x60	12x60	12x60	12x60	12x60
30...44	30...44	50...75	50...75	50...75	50...75	50...75	50...75	50...75	50...75
9	17	21	21	21	21	21	21	50	50

Ratings	25 - 40 Type D	63 Type K/D	100-125 Type D
Handle	VMZX 104	VMZX 104	VMZX 104
Handle Shaft	VMP5XP0	VMP5X70	VMP5X70
Handle Mounting Kit	-	-	-
Door Mounting Kit, 3P / 4P	DMK1/1A	DMK1/3	DMK2/3
Changover Mechanism	VMZW 6	VMZW 6/1	VMZW 6/1
Auxiliary Contact - 1NO + 1NC, 3P-4P	VMZX 49/87	VMZX 79/55	VMZX 52/55
Auxiliary Contact - 2NO + 2NC, 3P-4P	VMZX 50/88	VMZX 80/56	VMZX 53/56
Terminal Shrouds	-	-	SF701
Extended Terminals, 3P/4P	-	-	ET325/ET326
Key Interlock	VMZW-16	VMZW-16	VMZW-16
Castle Lock	VMZW-15	VMZW-15	VMZW-15
Neutral Link	-	-	-

100 - 160 Type DM	200 - 400 Type DM	400 - 800 Type D/K	1000 - 1800 Type K	2500 - 3150 Type K
VMWH 80 S6	VMWH 80 S8	VMWH 145 S12	VMWH 220 S12	VMWH 220 S12/ DA 8 ⁶⁾
VMP6X165	VMP8X240	VMP12X255	VMP12X255	VMP12X325
-	HMK-2	HMK-1-1	HMK-3-1	-
-	-	-	-	-
VMZW 6/1	VMZW 6/1	VMZW 11	VMZW 12	VMZW 12
VMZX 1	VMZX 37	VMZX 33	VMZX 35	VMZX 35
VMZX 16	VMZX 38	VMZX 34	VMZX 36	VMZX 36
SF702	SF703	SF703(200-400)/SF704(630-800)		-
ET327/ET328	ET329/ET330	ET329/ET330(upto 400A)	-	-
VMZW-16	VMZW-5	VMZW-5	VMZW-5	VMZW-5
VMZW-15	VMZW-4	VMZW-4	VMZW-4	VMZW-4
-	-	FZX85	VMZX159	VMZX159(2Nos.)

3) PF 0.95 4) PF 0.65 5) Max. Distance between busbar support and switch terminal shall be 70 mm 6) Metallic Handle (VMDA 8) for 2500 ~3150A available on request.



Mounting Instruction for Accessories

Auxiliary Contact

For VM 25-125 A

- Unscrew the two grub screws and remove the bush from the switch.
- Fit the auxiliary bracket onto the switch and place the locking bush on it.
- Fit the cam and screw it with the locking bush.
- Fit auxiliary contact at the corner and screw it diagonally.
- Fit the two NO/NC auxiliary at the other corner and screw it properly, if required.

For VM 100-160 A Compact (ZX1, ZX16)

- Place the auxiliary and name plate at rear end (opposite to mechanism) by ensuring name plate between auxiliary and switch and screw them properly.
- Fit the cam on the main shaft and screw it on the flat surface of the shaft.

For VM 200-400 A Compact (ZX37, ZX38)

- Fit the auxiliary contact on the top of mechanism and screw it diagonally at the provided holes properly.
- Fit the two NO/NC auxiliary at the top of the auxiliary and screw it diagonally, if required.

For VM 400-800 A (ZX33, ZX34)

- Fit the auxiliary contact on the top of mechanism and screw it diagonally on the provided thread.
- Fit the two NO/NC auxiliary at the top of the auxiliary and screw it diagonally, if required.

For VM 1000-3150 A (ZX35, ZX36)

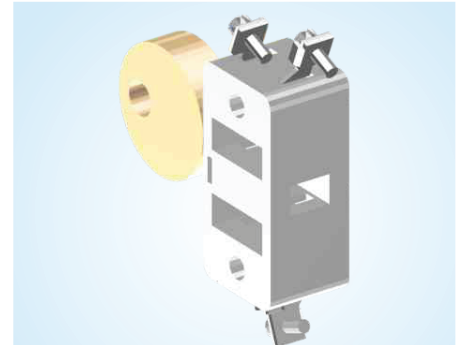
- Fit the cam on the tubular shaft with the square bush.
- Fit the auxiliary contact along with the bracket (Z type) by screwing diagonally, if provided separately.
- Place and screw the auxiliary contact onto the mechanism by matching of bracket hole and tubular shaft.

Auxiliary Contacts ratings

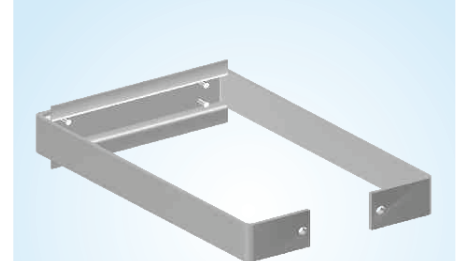
- Thermal Rating 10A
- AC 15 @ 415V - 4A
- DC 13 @ 220V - 1A



Auxiliary Contacts - 200A & above

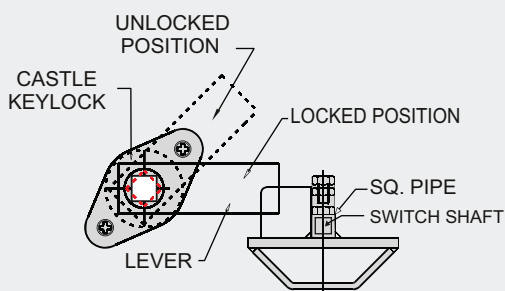


Auxiliary Contacts - 100A to 160A

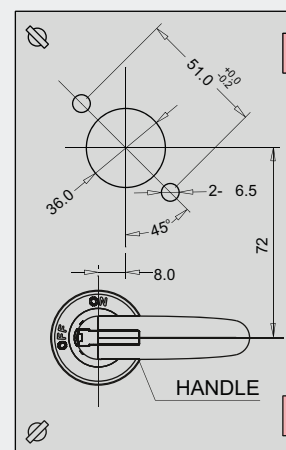


Door Mounting Kit
(25A - 125A Type D)

Castle Lock



Panel Drilling Plan

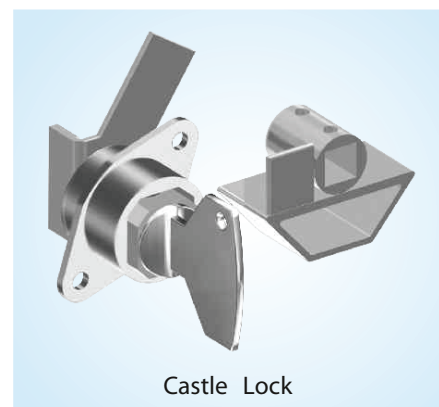


Catalogue No.	Type of Switch
VMZW15	VM 25~160A
VMZW4	VM 200~3150A

Mounting Instruction for Accessories

Castle Lock

- Make a hole in panel door for fitment of castle lock as per given drawing.
- Fit the castle lock onto the panel door from front.
- Fit the lever onto the lock shaft in unlock position from back and tighten the lever by providing U clamp and screw.
- Fit the Square pipe assembly with the switch main shaft and adjust the position so that the lever can lock it from behind of this assembly and tighten the screw.



Key Interlock

- Make a hole in the panel door for castle lock fitment as per given drawing.
- Fit the key lock onto the panel door from front.
- Fit the lever onto the lock shaft and circlip it in unlock position.
- Fit the square pipe assembly with the switch main shaft and adjust the position so that the lever can lock it in groove provided and tighten the screw.



Door Mounting Kit (25-125 A)

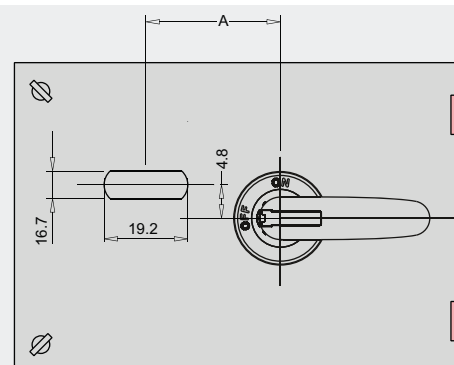
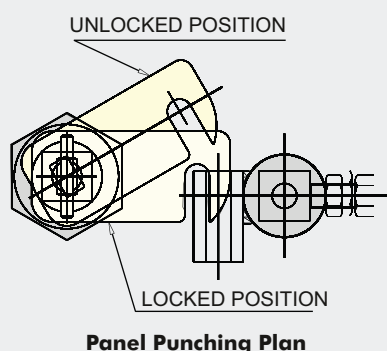
- Fit the switch at the rear using din rail mounting channel.
- Mount the channel using hole provided for screwing on the door.



Handle mounting Kit (200A-1800A)

- Unscrew the bolt (provided for earthing on mechanism) and Philips head screw (given below the earth bolt) as shown in model.
- Fit the handle mounting bracket and tighten the bolt and screw.
- Fit the handle assembly on given profile of the mounting kit.

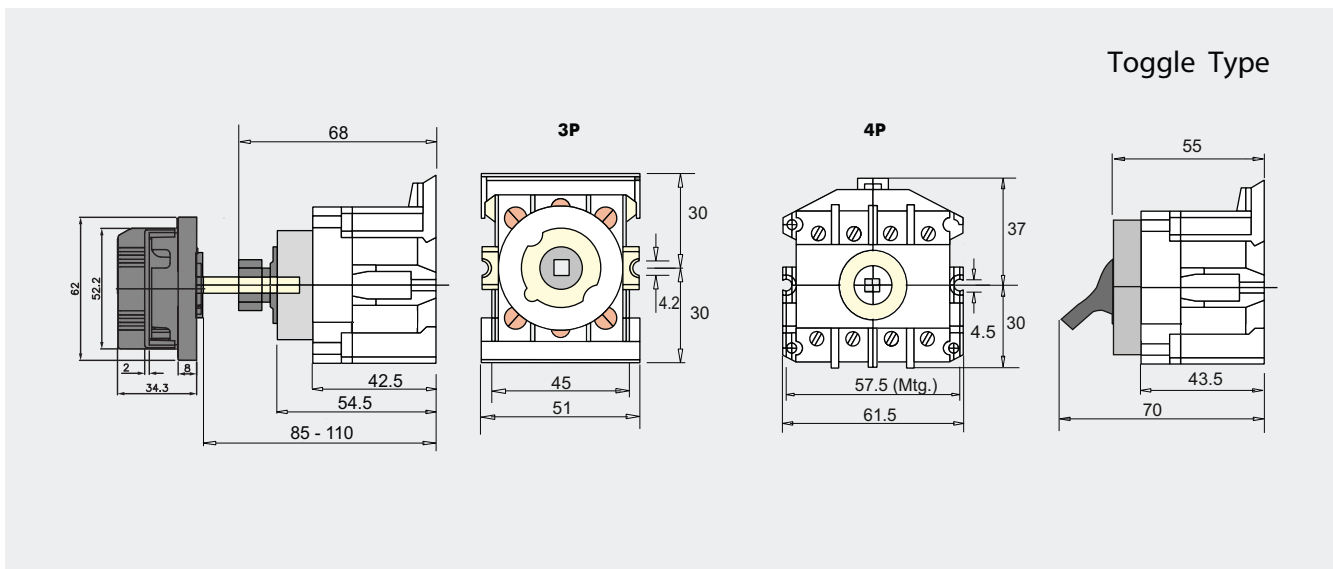
Key Interlock



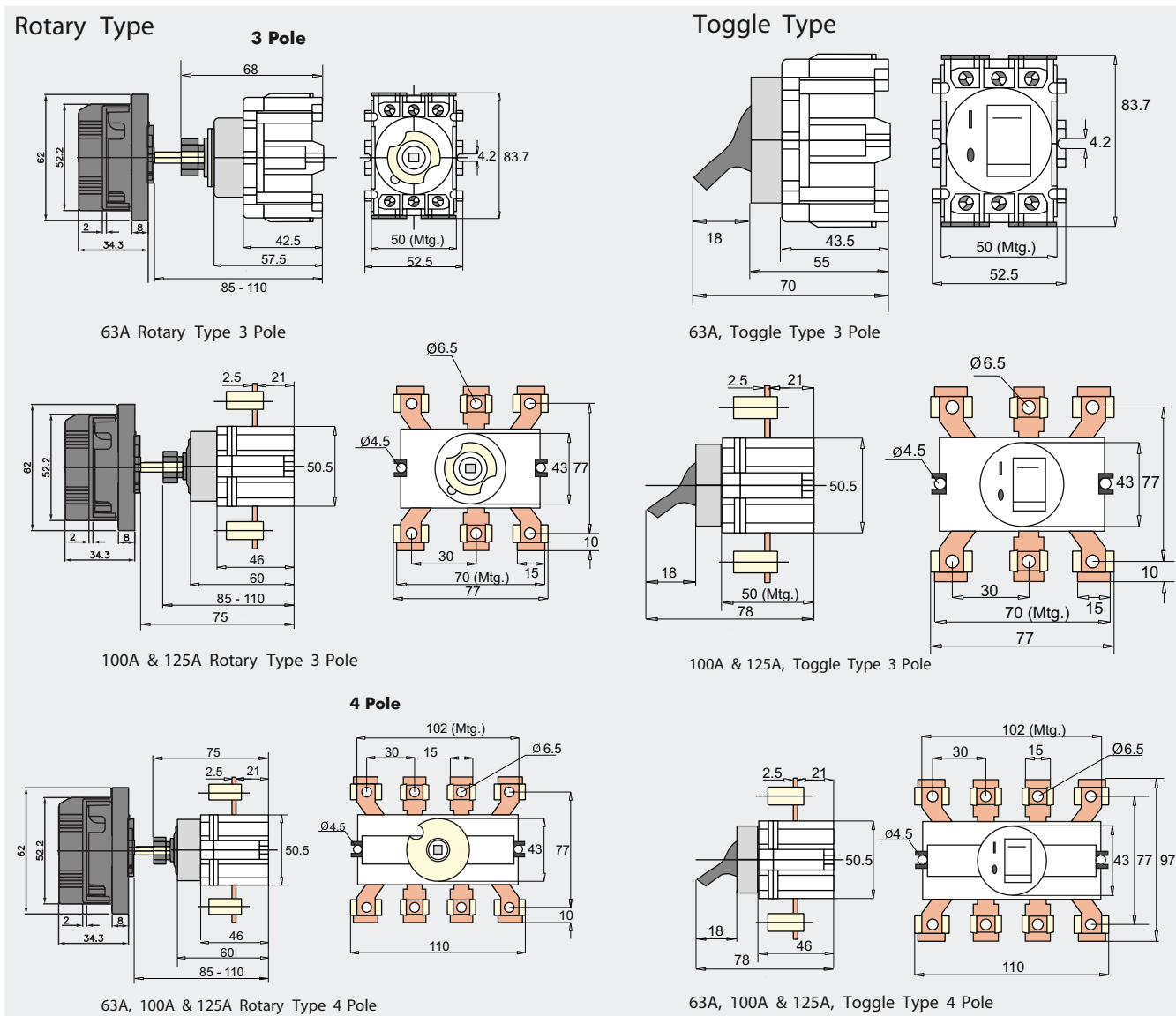
Catalogue No.	Type of Switch	'A'
VMZW16	VM 25~160A	47.7 ±0.3
VMZW5	VM 200~3150A	53.0 ±0.3

Dimensional Details

25A & 40A



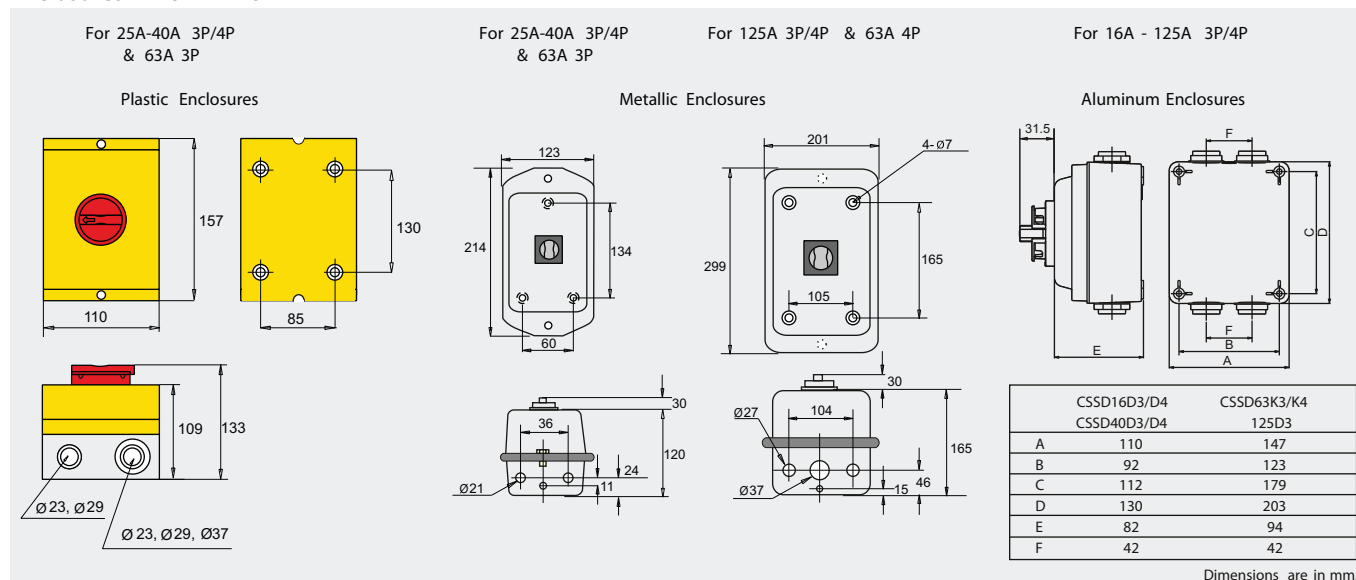
63A, 100A & 125A (Type D/K)



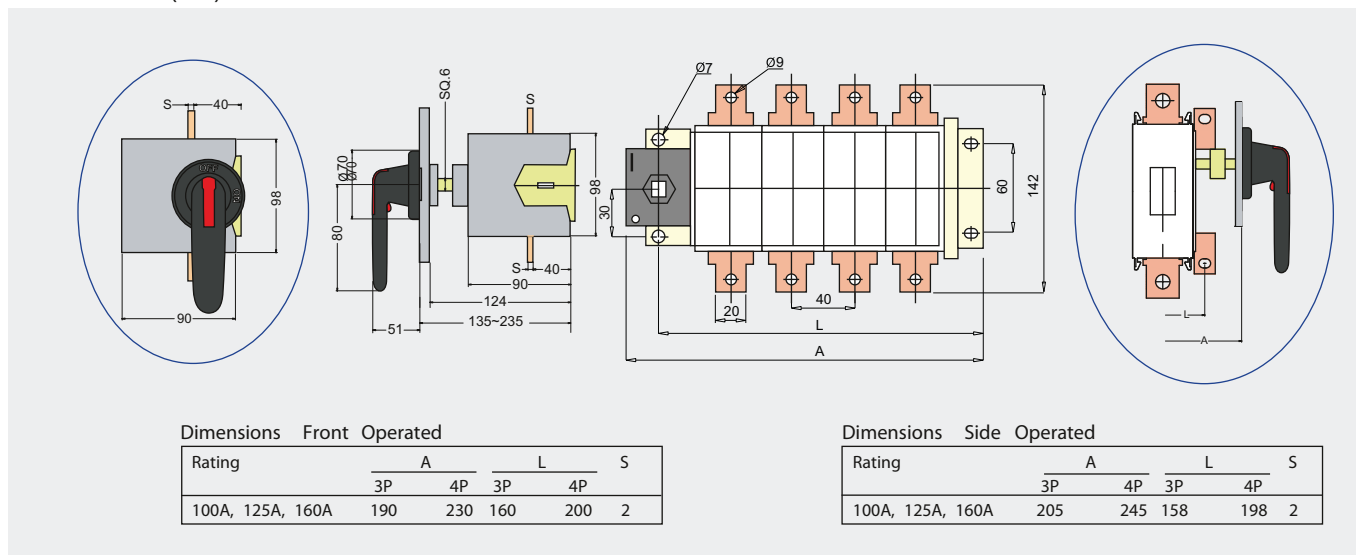
ILLUSTRATIONS NOT TO SCALE

Dimensional Details

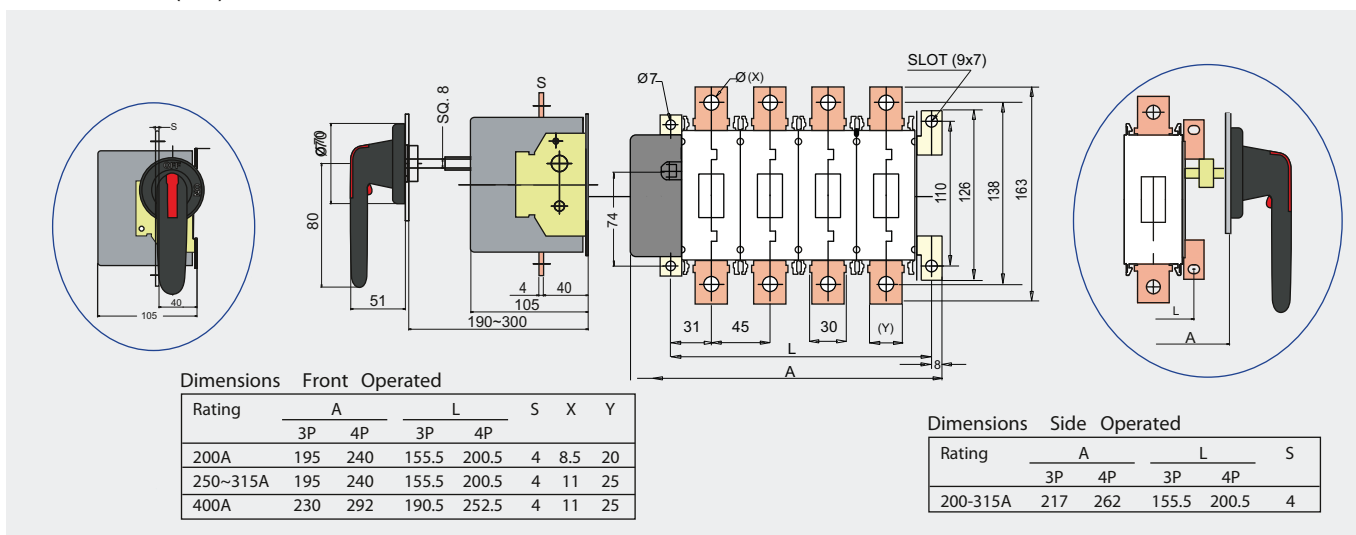
Enclosures 25A - 125A



100A - 160A (DM)

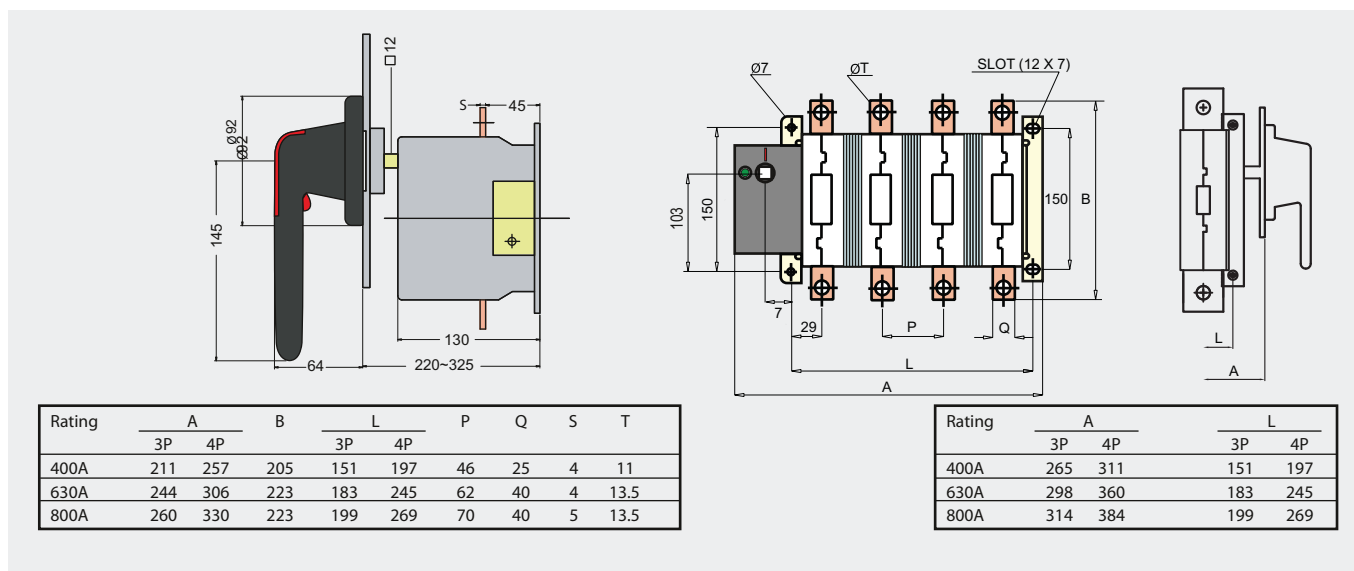


200A - 400A (DM)

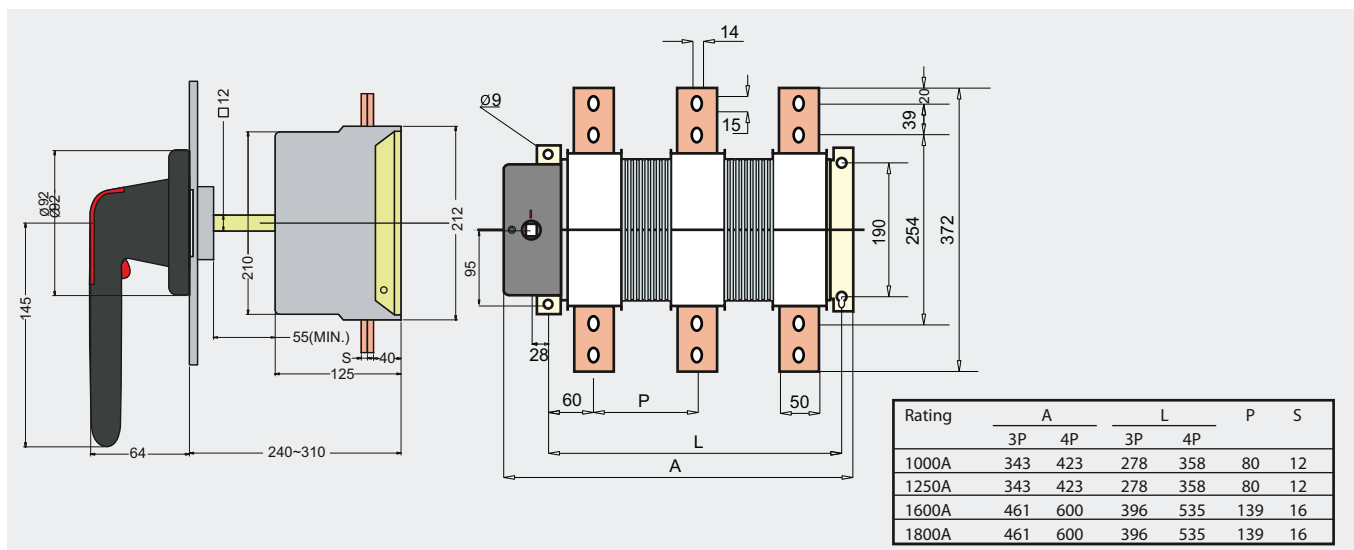


Dimensional Details

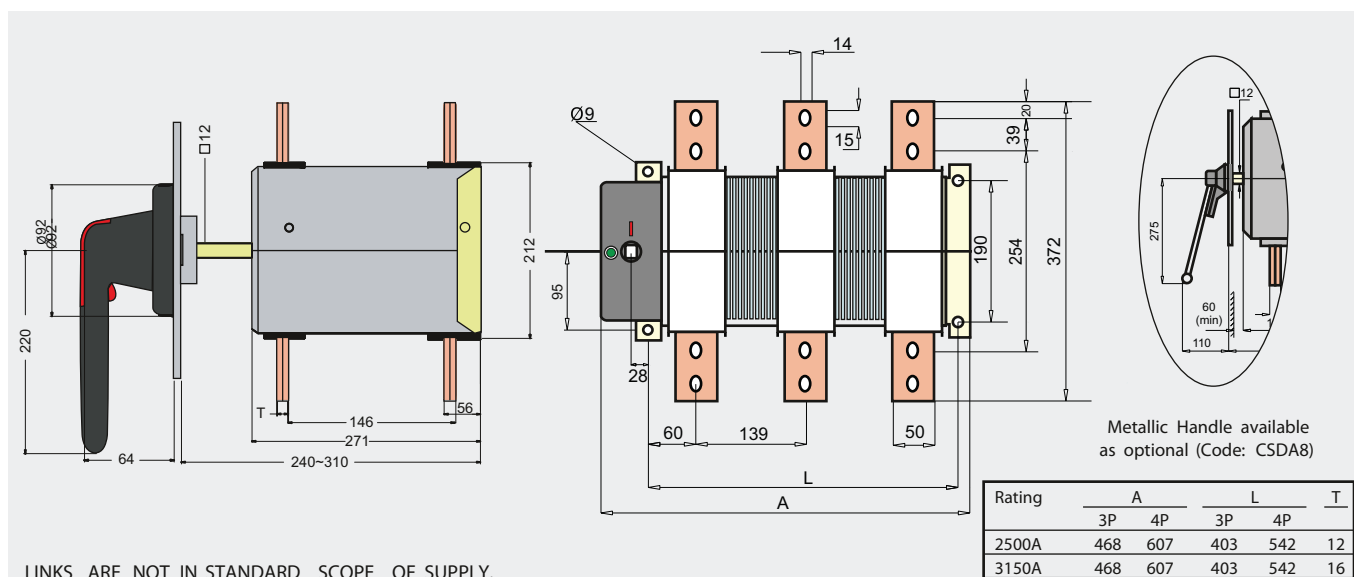
400A - 800A



1000A - 1800A



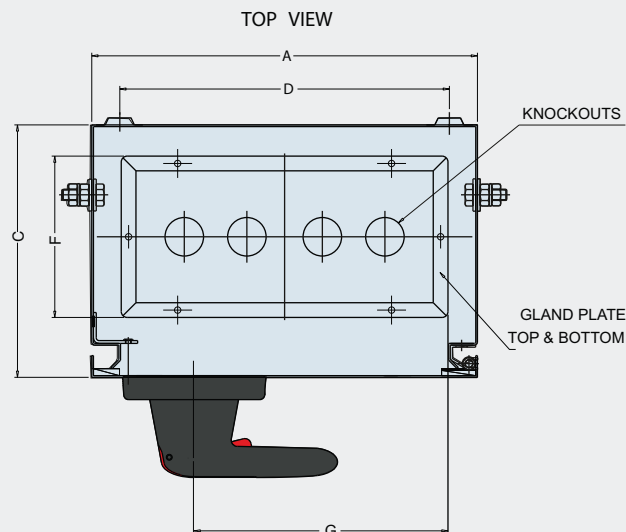
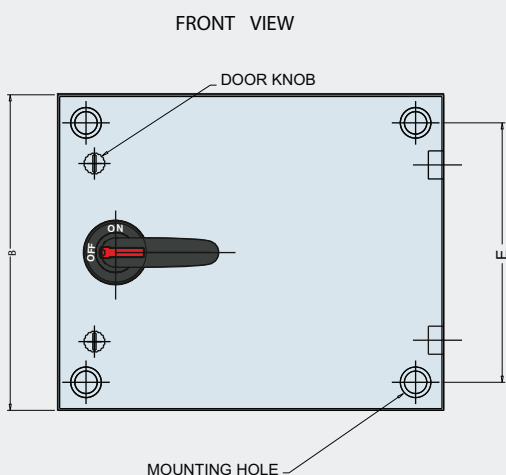
2500A - 3150A



LINKS ARE NOT IN STANDARD SCOPE OF SUPPLY.

ILLUSTRATIONS NOT TO SCALE.

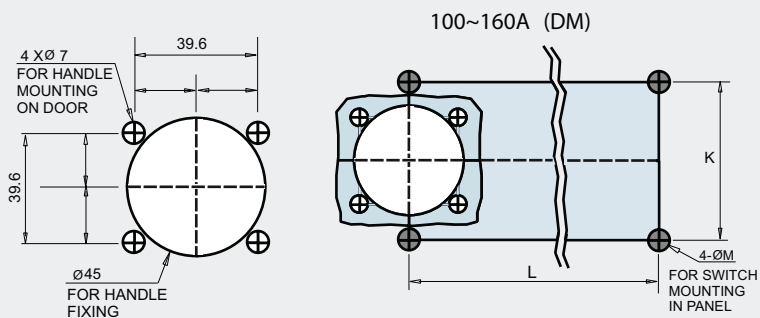
Enclosure 63A - 315A (DM) & 200A - 3150A



Rating	A	B	C	D	E	F	G
125 - 160A (DM)	275	275	180	235	235	115	233
200 - 315A (DM)							
400A (D3P/4P)	325	400	220	285	360	155	283
630 - 800A (3P)							
630 - 800A (4P)	400	400	220	360	360	155	358
1000 - 1800A (3P)	600	500	275	560	460	210	558
1000 - 1250A (4P) & 2500 - 3150A (3P)	600	600	350	560	560	285	483
1600 - 3150A (4P)	700	600	350	660	560	285	658

SS Enclosure Details	
Gasket Type	EPDM Sponge Rubber
Cover Sheet Thickness	18 SWG
Gland Sheet Thickness	16 SWG
Enclosure Paint Shade	Basalt Gray RAL 7012
Door Paint Shade	Light Gray RAL 7035
IP Level	IP54
Door Hinge Degree	120°
Earthing Studs	2

Mounting Details, 100 A - 315A (DM) & 200A - 3150A



For Mounting Details

Rating	K	L	M	U	V
		TPN	4P		
100A - 160A	60	200	160	7	-
400A	150	151	197	7	7
630A	150	183	245	7	7
800A	150	199	269	7	7
1000A - 1250A	190	278	358	9	24.5
1600A - 1800A	190	396	535	9	24.5
2500A - 3150A	190	403	542	9	24.5

