

Manual Motor Starter MU



- Overload protection
- Short circuit protection
- Phase differential detection
- DIN rail mounting
- Test facility
- Ambient temperature compensation
- Fingertouch protection
- Lockable off position
- Designed to EN60947-4-1 and EN60947-2
- Bus-bar system
- Enclosures



Options and ordering codes

Current Range Amps	Magnetic Short Circuit Trip-Amps	Product
0.10 - 0.16	1.92	MU25A 0.16
0.16 - 0.25	3.0	MU25A 0.25
0.25 - 0.40	4.8	MU25A 0.40
0.40 - 0.63	7.6	MU25A 0.63
0.63 - 1.00	12.0	MU25A 1.00
1.00 - 1.60	19.2	MU25A 1.60
1.60 - 2.50	30	MU25A 2.50
2.50 - 4.00	48	MU25A 4.00
4.00 - 6.30	75.6	MU25A 6.30
6.30 - 10	120	MU25A 10
10 - 16	192	MU25A 16
16 - 20	240	MU25A 20
20 - 25	300	MU25A 25

Specification

Rated insulation voltage UI	690V AC
Rated current Ith open, at 50 °C	25 amps
Mechanical life	100,000 ops
Electrical life – AC3 duty	100,000 ops
Switching frequency	30 ops per hour
Operate time – approximately	7 mS
Total power loss (warm condition)	6-8 W
Temperature compensation open	-20 to +55 °C
Rating auxiliary switch – AC15	400V 2A
Mounting position	Any
Power consumption – undervoltage trip	2.7VA 1.8W
– shunt trip	2.7VA 1.8W
Terminal wiring cross section 1 or 2 wires	main 0.75 – 4mm ²
aux	0.75 – 2.5mm ²
Weight	0.25 Kg

Accessories

Auxiliary Contacts



For fitting to the side of the unit
max 1 block each side.

Contacts	Product
1 Make + 1 Break (internal mount)	MU25A PE11
1 Break	MU25A PS01
1 Make + 1 Break	MU25A PS11
2 Makes	MU25A PS20
2 Early Makes	MU25A PV20

Shunt Trip



Trips out the unit as voltage is applied.
Mounting inside the unit.

Voltage	Product
24 AC	MU25A A24
110 AC	MU25A A110
220-240 AC	MU25A A240
380-415 AC	MU25A A400

Accessories continued

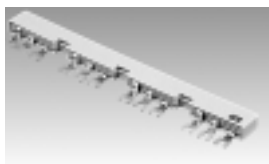
Undervoltage Trip



Trips out the unit should the voltage fall below 70% of the rated voltage, prevents automatic restart when voltage returns. For mounting inside the unit.

Voltage	Product
220-240 AC	MU25A U230
380-415 AC	MU25A U400
24 AC	MU25A U24
110 AC	MU25A U110

Bus-Bar System



System for connecting units together and incoming supply. Fully isolated $U_i = 690V$ $I_u = 63$ amps

Description	Product
For 2 units - 99mm	MBS25 D99
For 3 units - 154mm	MBS25 D154
For 4 units - 208mm	MBS25 D208
For 5 units - 262mm	MBS25 D262
Protection for unused terminals	MBS25 BS
Supply Block	MBS25 DB
Spacing Piece $\frac{1}{2}$ TE	P730

Current Limiter

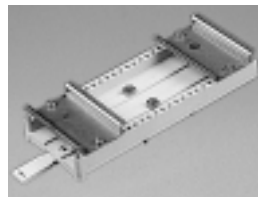


For increasing the fault breaking capacity of single unit or group back-up to 50kA.

$$U_i = 690V \quad I_u = 32A$$

Product
MBS25 ID50

Starter Carrier



Accepts contactor and manual motor starter to mount onto one DIN rail.

Product
MBS25 PL54

Enclosures



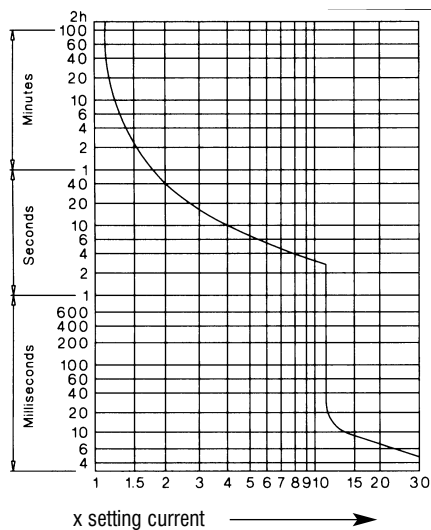
Description	Product
Moulded enclosure - IP55	MU25A O55
Moulded front plate - IP55	MU25A C55
Locking Bracket - 3 position	MU25A Z
Mushroom stop button	MU25A NAT
Green Indicator 240V	MU25A SG230
Red Indicator 240V	MU25A SR230
Earth or neutral conductor	MU25A NL
Moulded enclosure CEE Socket	MU25A GC1

Electrical Characteristics

Current Range	Rated Short Circuit Capacity kA				Back-up Fuse (gl)			
	220-240	380-415	500	660-690	220-240	380-415	500	660-690
0.10 - 0.16	100	100	100	100	●	●	●	●
0.16 - 0.25	100	100	100	100	●	●	●	●
0.25 - 0.40	100	100	100	100	●	●	●	●
0.40 - 0.63	100	100	100	100	●	●	●	●
0.63 - 1.00	100	100	100	100	●	●	●	●
1.00 - 1.60	100	100	100	100	●	●	●	●
1.60 - 2.50	100	100	3	2.5	●	●	25	25
2.50 - 4.00	100	100	3	2.5	●	●	35	25
4.00 - 6.30	100	100	3	2.5	●	●	50	35
6.30 - 10	100	6/50*	3	2.5	●	80	50	35
10 - 16	10/100*	4/50*	2.5	2	80	80	63	35
16 - 20	10/100*	4/50*	2.5	2	80	80	63	50
20 - 25	10/100*	4/50*	2.5	2	80	80	63	50

*kA with current limiter MBS25-ID50 up to 415V AC ● Fuse not required

Trip curve

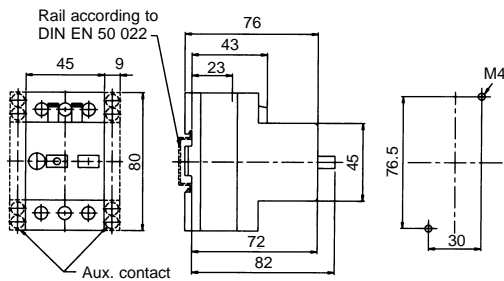


Trip curve
1. Three phase trip curve

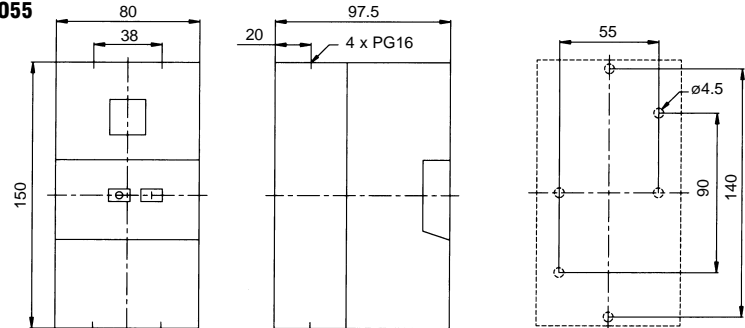
Average value of typical tolerance curves from cold condition

Dimensions (mm)

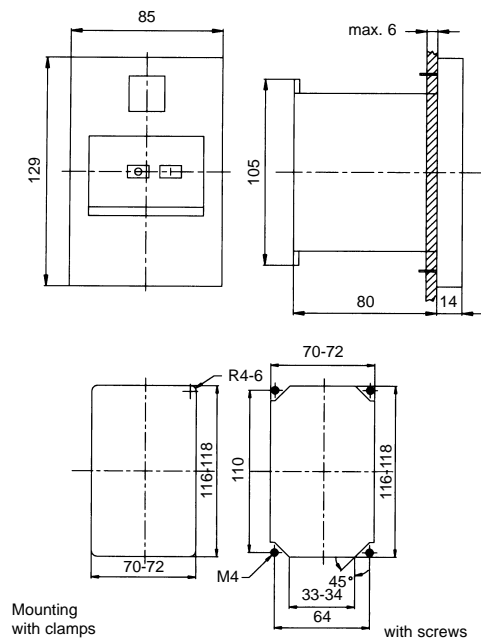
**Manual Motor Starter
MU25A**



**Moulded Enclosure
MU25A-055**



**Moulded Front Plate
MU25A-C55**



**Moulded Enclosure for 5-pole CEE-plug
MU25A-GC1**

