
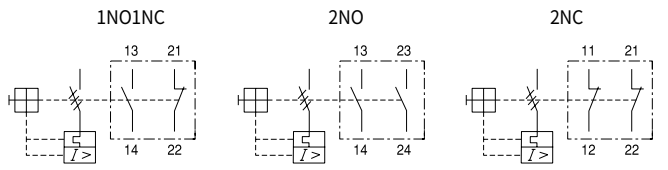

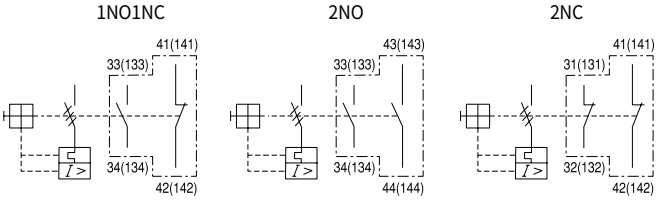



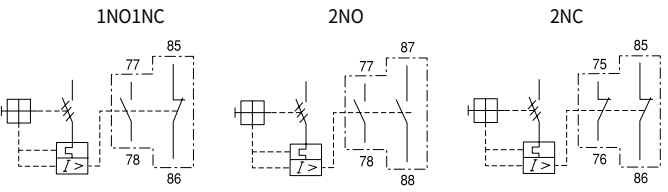



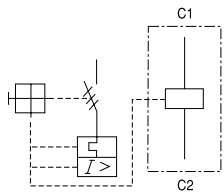

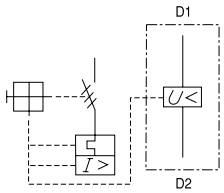

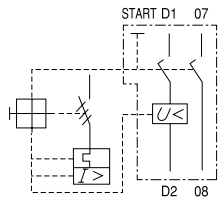
Accessories (Electrical Auxiliaries)

Type	Description	Connection diagram
<p>FX...</p> 	<p>Auxiliary Switch</p> <ul style="list-style-type: none"> • Front mounting • 2-pole • One front mounting module per circuit breaker 	
<p>LX...</p> 	<p>Auxiliary Switch</p> <ul style="list-style-type: none"> • Side mounting on the left • 2-pole • One side mounting module per circuit breaker 	
<p>LA...</p> 	<p>Any Trip Alarm Switch</p> <ul style="list-style-type: none"> • Operates in case of trip • Side mounting on the left • 2-pole • Set LA first in case of using LX together (MMS-63 can not accept LX and LA together) • For MMS-32 and MMS-63/100 products are separated. 	
<p>LAM...</p> 	<p>Magnetic Trip Alarm Switch</p> <ul style="list-style-type: none"> • Operates in case of short circuit accidents that is over 20 times of the rated current • Side mounting on the left • 2-pole • Set LAM first in case of using LX together 	

Manual Motor Starters

Product Selection Guide

Accessories (Electrical Auxiliaries)

Type	Description	Connection diagram	
RS...	 <p>Shunt release</p> <ul style="list-style-type: none"> Side mounting on the right One side mounting module per circuit breaker. Can not use with RU or RUX 		<p>24V 50Hz / 28V 60Hz 110V 50Hz / 120V 60Hz 200V 50Hz / 200~220V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz</p>
RU...	 <p>Undervoltage release</p> <ul style="list-style-type: none"> Side mounting on the right One side mounting module per circuit breaker. Can not use with RU or RUX 		<p>24V 50Hz / 28V 60Hz 110V 50Hz / 120V 60Hz 200V 50Hz / 200~220V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz</p>
RUX...	 <p>Undervoltage release with Switch</p> <ul style="list-style-type: none"> Side mounting on the right Include 2NO Auxiliary contact One side mounting module per circuit breaker. Can not use with RU or RUX Can not attach to MMS-32S 		<p>24V 50Hz / 28V 60Hz 110V 50Hz / 120V 60Hz 200V 50Hz / 200~220V 60Hz 220~230V 50Hz / 240~260V 60Hz 240V 50Hz / 277V 60Hz 380~400V 50Hz / 440~460V 60Hz 415~440V 50Hz / 460~480V 60Hz</p>



● E-Handle (Rotary-type)

MMS E-Handle is a Rotary-type Handle accessory which can be attached to the front to control and verify the ON, TRIP, OFF condition of Manual Motor Starters under the situation of closing panel.

- Application Model : MMS-32H/HI, MMS-63S/H/HI, MMS-100S/H/HI
- Operation temp. : -20~ +60°C
- CE and UL certified
- Degree of protection : IP65(UL Type1, Type3R)
- Locking device : Lockable in on/off position
- Material of insulation : Plastic(PA66)

Type	Application MMS	Remarks
MEH-32	MMS-32H, 32HI	Length of shaft : 115 or 315mm
MEH-63	MMS-63S, 63H, 63HI	
MEH-100	MMS-100S, 100H, 100HI	

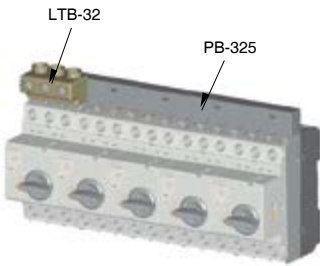


● Phase Bus System

It is a device for a parallel connection with power terminals in the circuit lined up by MMS, and it can provide the solution “Simple wiring” and “Compact wiring space”.

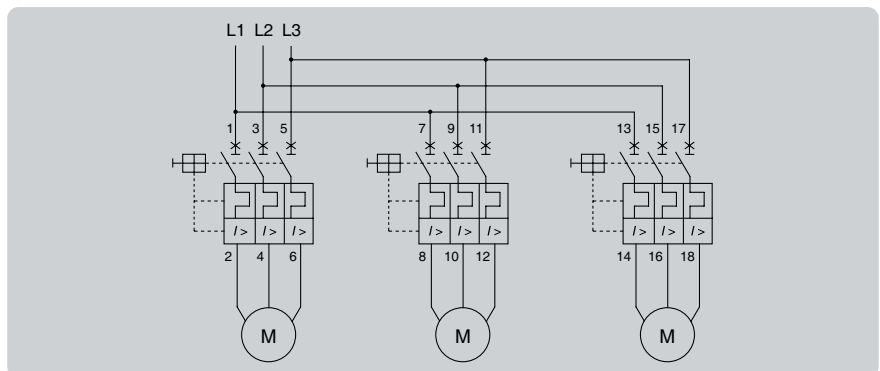
- Application Model : MMS-32, 63
- CE and UL certified
- Safety Cover built-in
- RoHS compliance

Type	Application MMS	Number of Terminals	Rated current	Safety cover attached
PB-322	MMS-32S, 32H, 32HI	2	63A	PBPC-32
PBL-322	MMS-32S, 32H, 32HI with Aux (LX or LA or LAM)	2		
PB-323	MMS-32S, 32H, 32HI	3		
PBL-323	MMS-32S, 32H, 32HI with Aux (LX or LA or LAM)	3		
PB-324	MMS-32S, 32H, 32HI	4		
PB-325	MMS-32S, 32H, 32HI	5	108A	PBPC-63
PB-632	MMS-63S, 63H, 63HI	2		
PB-633	MMS-63S, 63H, 63HI	3		



Model	LTB-32
Pole	3P
Mounting location	Upstream
IP degree of protection	IP20 according to IEC 60529
Rated insulation voltage (Ui)	690V according to IEC 60947-1
Rated operational current (Ie)	63A
Terminal torque	1.7 N.m- on screw clamp terminals

● Diagram



● Terminal Block (TB-32)

It is an accessory device for ensuring the insulation distance between phases. When this device is used, it meets the requirements of UL Combination Motor Controller Type E.

- Application Model : MMS-32H, HI

dItem code	Descriptionddd	Remark
62671941002	TERMINAL ASS'Y,LUG,TB-32	For Type-E self-protected motor controller

Manual Motor Starters

Product Selection Guide

Accessories (Electrical Auxiliaries)



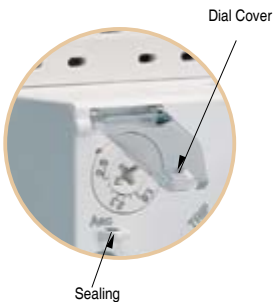
● Enclosure

Case cover of MMS enclosure is specifically designed with dust-proof and corrosive-proof structure.

Therefore, it is the optimum product to use in dusty areas such as cement plants, cotton mills as well as in the presence of corrosive gas or liquid (excl. explosive, flammable gas) such as fertilizer, refinery, and plating plant.

- Application Model: MMS-32H/HI
- Operation temp. : -20~ +60°C
- CE and UL certified
- Degree of protection : IP65
- Material of insulation :Plastic(ABS)

Type	Application MMS	Remarks
EPH-32	MMS-32H, 32HI	Surface mount



● Dial Cover

Dial cover is used to protect the set value from the operation that is not intended.

- Application Model : MMS-32, 63,100 (All types)

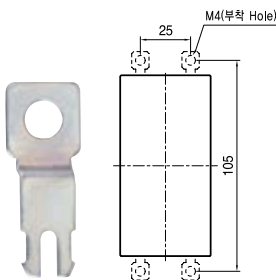


● Insulation Barrier

Insulation barrier is used to enlarge the creepage distance and clearance to meet the requirement of UL.

- Application Model : MMS-100

Type	Application MMS
IB100	MMS-100S, 100H, 100HI



● Screw mounting holder

32AF MMS is only for DIN rail mountable by itself. Screw mounting holder is used to mount MMS on a panel by screws.

- Application Model : MMS-32

Type	Application MMS	Remarks
MP-32	MMS-32S, 32H, 32HI	For M4 screw

● Direct adaptor and Mounting unit

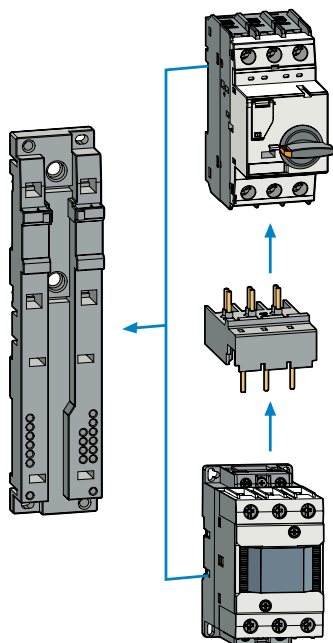
Direct adaptor , DA

Direct adaptor is used to connect MMS directly with a contactor

Mounting unit , MU

This device is attached module to connect joined MMS with a contactor

· Application Model : MMS+ Susol, Metasol contactor(MC-9~95, MC-6a~100a), Mini contactor



Direct adaptor		Mounting unit	Combined devices	Applying Contactor	
Frame	Name				
DA-16	DA-16SA	MU-45	MMS-32S + GMC-6M~16M	Mini-MC	
	DA-16SD		MMS-32S + GMD-6M~16		
	DA-16HA		MMS-32H + GMC-6M~16M		
	DA-16HD		MMS-32H + GMD-6M~16M		
DA-18	DA-18SA		MMS-32S + MC-6a~18a	Metasol MC	
	DA-18SD		MMS-32S + MC-6a~18a DC		
	DA-18HA		MMS-32H + MC-6a~18a		
	DA-18HD		MMS-32H + MC-6a~18a DC		
DA-22	DA-22SA		MMS-32S + MC-9b~22b		Metasol MC
	DA-22SD		MMS-32S + MC-9b~22b DC		
	DA-22HA		MMS-32H + MC-9b~22b		
	DA-22HD		MMS-32H + MC-9b~22b DC		
DA-32	DA-32SA		MMS-32S + MC-9~32(32a, 40a)	Susol, Metasol MC	
	DA-32SD		MMS-32S + MC-9~32(32a, 40a) DC		
	DA-32HA		MMS-32H + MC-9~32(32a, 40a)		
	DA-32HD		MMS-32H + MC-9~32(32a, 40a) DC		
DA-63	DA-63A	MU-55	MMS-63AF + MC-35~63 (50a, 65a)	Susol, Metasol MC (Lug Type Only)	
	DA-63D		MMS-63AF + MC-35~63 (50a, 65a) DC		
DA-95	DA-95A	MU-70	MMS-100AF + MC-65~95 (75a, 85a, 100a)		
	DA-95D		MMS-100AF + MC-65~95 (75a, 85a, 100a) DC		



Note) MMS and Contactor connected with Direct adaptor.