

ReliaGear™ LV MCC with AFM

Arc flash mitigation units for low voltage motor control



ReliaGear™ LV MCC with arc flash mitigation (AFM) units is an offering for customers and specific applications where additional protection of personnel is essential. The AFM units were designed to help mitigate the electrical shock hazards for motor control centers.

New level of arc flash mitigation

ReliaGear LV MCC AFM units are designed to reduce the likelihood of exposure to electrical shock and the potential of internal arcing faults from occurring during maintenance. The retractable stab mechanism allows for closed-door racking of the unit, providing added protection to the electrical personnel from the dangers of an arc flash occurrence.

IP20 protection options are available in starter units including IP20 control power transformer fuses and pilot devices.

Safety. Awareness. Ease of maintenance.

A safety interlock prevents customers from opening the unit door and racking out the stab when the unit is energized. The visual indicators on the front of the units provide personnel with a clear view of the status of the stab and vertical bus isolation shutter.

AFM features

- Two-position closed-door retractable unit stabs
- Automatic operation vertical bus isolation shutter

- Stab and shutter position indicators on unit doors
- Padlock for racking screw and stab-breaker interlock
- Optional IP20 safety features and incidental contact barriers
- Stab and door Interlock: prevents opening the unit door when stab is energized
- Stab and unit interlock prevents user from taking the unit out when stab is energized or, inserting the unit into the bus when stab is extended
- Racking screw and disconnect interlock prevents the user from racking the stab in/out of the unit with the disconnect in the “ON” position

Applicable standards and guidelines

- ICS-18
- UL 508, UL 845
- IEEE 1683

Ratings

- Main bus: 600 - 3200 A
- Vertical bus: 300/600/850 A
- Unit type: Plug-in only
- Voltage/Short Circuit: 480 V/100 kAIC and 600 V/65 kAIC; 600 V/100 kAIC for fuse switch

Unit types available

- Feeders with molded case circuit breakers
- Surge protection devices (SPD) units
- ACS580 variable frequency drives (VFD)
- Full voltage non-reversing starters (FVNR)
- Full voltage reversing starters (FVR)
- ASTAT soft starters

Other options

- Voltage vision-test for absence of voltage
- Remote racking device
- Infrared thermal scanning provision
- Motor guard-motor insulation tester
- Basic motor protection relay with communication†
- Advanced motor protection relay with communication, such as the UMC 100.3, Multilin MM200 and MM300

Sample unit sizing†

Unit type	NEMA size	Standard unit height (in)
FVNR	1	18
FVNR	2	18
FVNR	3	24
FVNR	4	30
FVNR	5	48
FVR	1	24
FVR	2	30
FVR	3	42
FVR	4	42

Unit type	Routing @480 V	Standard unit height (in)
ASTAT-BP (integral bypass)	5-30 hp	18
	40-50 hp	24
	60-100 hp	30
ASTAT-XT (external bypass)	5-20 hp	24
	25-20 hp	30
	0.5-7.5 hp	30
	7.6-30 hp	36
	30.1-75 hp	42
ACS580 VFD	-	-
CB feeders	up to 150 A	12
CB feeders	up to 250 A	18
CB feeders	up to 600 A	24
SPD	-	24

† Heights subject to final configuration

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