ICM Controls ICM518 Surge Protective Device for Split Phase Configuration Instruction Manual

Made in USA

Surge Protective Device for Split Phase configuration

Contents

ICM518 Surge Protective Device for Split Phase Configuration

Please follow all State, Local and National electrical codes when installing this product. Installation should only be done by a licensed electrician for Type 1 devices or a licensed HVAC technician for Type 2 devices.

ELECTRICAL SHOCK HAZARD – Before installing this unit, turn off power at the main service panel by removing the fuse or switching the appropriate circuit breaker to the OFF position.

- WARNING — No Serviceable Parts (Attention: Aucune pièce remplaçable ou reparable).
- WARNING — Shock hazard — Do not open (ATTENTION – RISQUE DE CHOC – NE PAS OUVRIR).

Maintenance

Periodically check the LED status on the SPD. If the Greenlight is OFF, the protection is no longer available and the SPD needs to be replaced immediately. 12 AWG stranded copper wire or larger required. Product contains no serviceable parts. This device features an internal protection that will disconnect the surge protective component at the end of its useful life but will maintain power to the load – now unprotected.

Mode of Operation

The ICM518 is a UL Listed Type 1&2 Surge Protective Device for 240 VAC Split Phase voltage configurations. When a surge occurs, the ICM518 will absorb the surge up to the limits expressed in the specifications section of this guide. The ICM518 incorporates thermal protection on the surge lements (TMOV's) which allows for safe disabling of the surge elements when a surge exceeds the thermal limits of the device. The ICM518 has a status light on the control which identifies operational status when illuminated. The ICM518 can be installed as a Type 1 or Type 2 device for both indoor and outdoor applications. Suitable for use on a circuit capable of delivering not more than 200kA RMS symmetrical amperes, 240V maximum (Convient à des circuits produisant au plus 200kA RMS A eff.", 240V maximum).

Installation Instructions

The conductors used to connect the SPD shall not be any longer than necessary and shall avoid unnecessary bends.

1. Turn off the main breaker and/or main power to the service disconnect.
2. Verify your mains voltage and match that with the ICM518 ratings.
3. Remove the cover on the service disconnect or the electrical panel.
4. Mount the ICM518 through the 3/4" conduit connection of the electricalpanel.
5. Remove the retaining ring and washer on the ICM518.
6. Feed the wires into the electrical panel or service disconnect.
7. Re-secure the retaining ring and washer.
8. Route the white wire to the neutral lug and secure.

   Wiring Type 1 installation

   Route the two black wires to the appropriate L1 and L2 connections before the breaker panel as seen in the wiring diagram for Type 1 installation and according to your local, state, and national electrical codes.

   Connect the white wire to the Neutral Bus.

   Wiring Type 2 installation

   Route and connect the two black wires (L1 and L2) to the individual breakers on the circuit breaker panel as seen in the wiring diagram for Type 2 installation and according to your local, state and national electrical codes.

   Connect the white wire to the Neutral Bus.

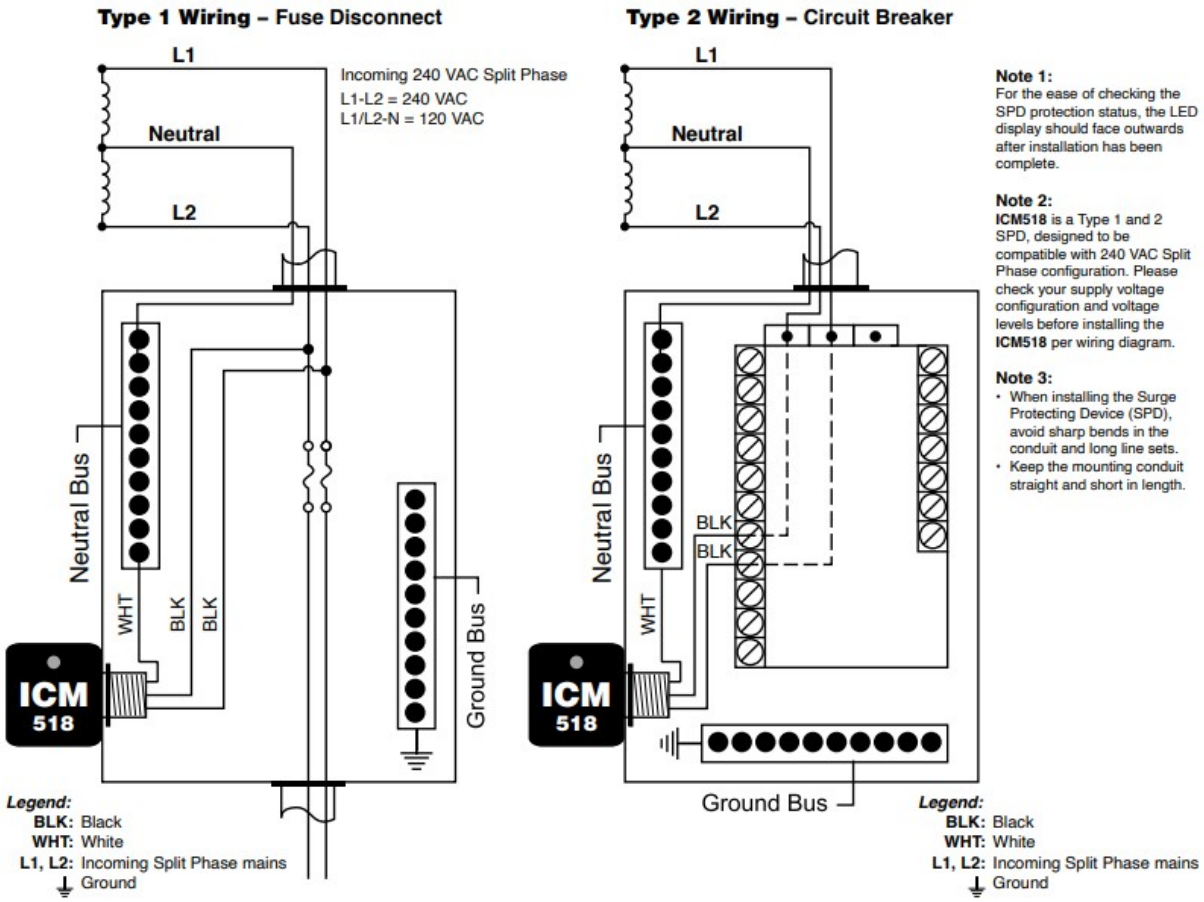
9. Reinstall the cover on the service disconnect or the electrical panel.
10. Restore power; Green LED should be on indicating full protection.

Specifications

Description	Ratings
Service Voltage	Split Phase 240 VAC
Short Circuit Current Rating (SCCR)	200 kA
Nominal Discharge Current (In)	20 kA
SPD Type	Type 1 (Can also be used in Type 2 applications)
Surge Protection Technology	TFMOV
Protection Mode	L1-L2, L1-N, L2-N
VPR (Vpk)	VOLTS (V) MODE VPR (Vpk) 240 L-L 1200 L-N 700
Maximum Continuous Operation Voltage (MCOV)	L-L: 300 VAC L-N: 150 VAC
Input Power Frequency	50/60Hz
Diagnostics	Green LED indicates surge protection present
Enclosure Rating	NEMA/Type 4X water tight plastic enclosure for outdoor and indoor installation
Installation Point	Electrical panel/disconnect
Dimensions	4.3” X 4.1” X 2.3”
Operating Temperature	-40°F to 185°F (-40°C to 85°C)
Operating Humidity	Less than 85%, noncondensing
Operating Altitude	Less than 2000 meters
Agency Certification and Approvals	ANSI/UL1449 4th Edition Listed Device cULus Listed

Wiring Diagrams – Split Phase Configuration

ICM518 is a Type 1 and 2 SPD, designed to be compatible with a 240 VAC Split Phase configuration. Please check your supply voltage configuration and voltage levels before installing the ICM518 per wiring diagrams below.



LIMITED LIFETIME PROTECTION WARRANTY

Review enclosed warranty information for full details & registration information
For warranty registration, please go to www.icmcontrols.com and click on Warranty Registration

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Documents / Resources

	[ICM Controls ICM518 Surge Protective Device for Split Phase Configuration](#) [pdf] Instruction Manual ICM518 Surge Protective Device for Split Phase Configuration, ICM518, Surge Protective Device for Split Phase Configuration, Device for Split Phase Configuration, Split Phase Configuration, Phase Configuration, Configuration

References

- ICM Controls| ISO certified Electronics Manufacturing Company