

SMARTSERIES

HIGH/LOW VOLTAGE DETECTOR



MODEL: HLVD-20A



POWER PROTECTION



SPEED



REACTION TIME



MODEL: HLVD-20A

SMART SERIES HLVD

FEATURES



PROCESSOR CONTROLLED



HIGH/LOW VOLTAGE DETECTOR



LED ALERT: ORANGE/DELAY MODE



LED ALERT: SLOW RED/SURGE



LED ALERT: FAST RED/VOLTAGE DIP



6 YEAR REPLACEMENT WARRANTY

PROTECTS



WHOLE CIRCUIT PROTECTION



MOTOR/PUMP BURN OUT PROTECTION



SHUTDOWN PROTECTION (AUTO RE-START)



COMPRESSORS

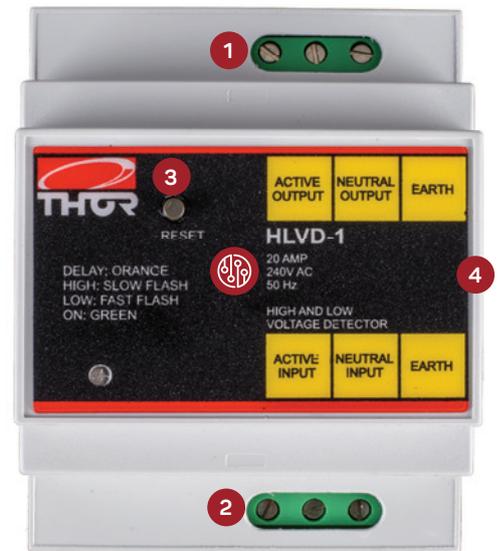


AIR-CONDITIONERS

AUTOMATIC HIGH/LOW VOLTAGE DETECTOR

When power voltage fluctuates electrical equipment suffers. The HLVD is designed to automatically detect a problem then offer shutdown protection until the danger subsides. Once the voltage returns to a safe level then the HLVD automatically re-activates power to the circuit. The protection is against both high and low voltage incidents. The HLVD has an inbuilt factory delay of 3 minutes this is primarily because it is designed to protect electric motors, refrigeration and air-conditioning compressors from burning out or blowing up. If a compressor is under load and the power is turned on/off quickly this action can cause a compressor irreparable damage. If an electric motor is supplied low voltage for a period of time this type of supply can cause the motor to burn out.

- 1 High voltage - surge protection
- 2 Low voltage - brown out protection
- 3 Auto reset & manual override
- 4 Adjustable delay available via factory setting



The HLVD will allow power to pass through as long as the voltage supply is above 190V (low) or below 270V (high). Should the voltage move out of the predefined "safe" window then the HLVD reacts by offering shutdown protection and cutting supply until the voltage supply returns to the "safe" level. If the power moves in and out of the "safe" level then each incident resets the on board clock count down to reactivation, this feature prevents damage occurring when voltage is unstable or erratic.

The delay can be reduced down to seconds or increased if need be. An example of reducing the delay could be applied to applications where equipment is not pressurised or does not require any lengthy delay. An example would be a lighting circuit, in this example the lights may become damaged if there is too much voltage going through and the HLVD would be a great option to protect the circuit. Other applications may be control equipment or PLC's, printing presses, commercial kitchen equipment, office printers, photocopiers, dishwashers, fridges, freezers, dryers etc.

TECHNICAL SMARTS

Product Dimensions: 70mm x 90mm x 60mm | Supply voltage 240V/AC 50Hz | Maximum current rating 20amps/4800 W (VA) | Reaction Speed 800 m/secs | Detection Voltage 190V to 270V | Delay 180 seconds (3 minutes) | LED combination Green = Ok, Orange = Delay mode | LED combination Red (slow flash) = High Voltage detected, RED (fast flash) = Low Voltage detected | Reset Delay override (push button on front) | Operating Temperature -10C/+60C | Housing High Temperature impact Polycarbonate Housing Din Rail Mount | Model No. HLVD 20A.

INSIDE THE SMART BRAIN

This has a processor controlling the voltage regulation. If the voltage changes outside of the "safe" window, 190V low or 270V high, then the HLVD shutsdown the power. The internal processor clock then monitors the voltage and when the voltage returns within the "safe" window it waits 3 minutes before re-activating the power automatically. Thus making sure the connected equipment only ever receives safe power. If the voltage travels outside the "safe" window while the timer is on then the timer re-sets. **Note:** Factory delay 180 seconds/3minutes can be adjusted down to a few seconds if shorter delay required.



THOR Technologies Pty Ltd
PO Box 95, Karingup Western Australia 6921
thortechnologies.com.au



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