



## OVERVOLTAGE RELAY

The Novaris OVR protects against sustained fluctuations in the supply voltage. An OVR in conjunction with a Novaris surge filter or diverter provides the ultimate level of protection for your application.

Novaris over/under voltage protection is designed for the protection of equipment against extended over voltages such as line-to-line faults in a three-phase system, and extended voltage sags that may cause excessive current consumption in induction motors.

The incoming supply is monitored by the over / under voltage relay where it is compared to user-defined high and low cut-off points. Should the voltage rise or fall outside of these points the relay will de-energise the main contactor thereby isolating all loads, including the surge protection. When the supply voltage returns to normal the relay will re-energise the main contactor, restoring power to the

surge protector and all connected loads. Because the contactor opens in front of the main surge protection, it also eliminates the risk of MOV overload due to sustained overvoltages.

The over / under voltage relay and its associated circuitry can withstand a 415V phase-to-neutral fault voltage indefinitely. Even with the surge protection isolated during a fault condition, each sensor input is protected by an auxiliary filter against surge currents of up to 40kA (8/20 $\mu$ s).

Voltage thresholds are user-adjustable between 180 - 240VAC for under voltage tripping and 240 - 300VAC for over voltage tripping. There is additional provision hysteresis setting up to 15% of the applied voltage, which can be used to prevent nuisance tripping if the measured signal is noisy or unstable.

### OVR1 OVR3

#### Specifications

Description:	Over/under-voltage protection
Nominal voltage:	240/415VAC Other voltages available on request
Working voltage:	100 → 415VAC (L-N)
Nominal frequency:	50 / 60Hz
Maximum load:	Depends on contactor rating
Working temperature:	-10 → 60°C
Working humidity:	0 → 90%
Switching thresholds:	Adjustable to $\pm$ 30% of nominal voltage
Switching delay:	<150 $\mu$ s
Hysteresis:	Adjustable up to 15%
Display:	LED indication of status
Sensor surge protection standards compliance:	AS1768-2003 Cat C IEEE C62.41-1991 Cat C3 BS6651:1999 Cat C - high SS CP33:1996 Cat C IEC1000-4-5-1995 UL1449 2 <sup>nd</sup> edition
Power consumption:	Dependant on contactor size.
Earth leakage:	<10 $\mu$ A

#### Ordering Guide

##### OVR x - y

x = Number of phases: 1, 3  
y = current rating per phase  
e.g. OVR3-630

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