# Insulation monitoring relays for unearthed supply systems
## Ordering details

NEW

CM-IWS.2

CM-IWS.1

CM-IWN.1

CM-IVN

### Description

The high reliability of an IT system is guaranteed thanks to continuous insulation monitoring. An insulation monitoring device recognizes insulation faults as they develop, and immediately reports that the value has fallen below the minimum. This prevents operational interruption caused by a second, more severe insulation fault.
ABB developed a totally new range of insulation monitors for AC, DC or mixed AC/DC IT Systems up to 690 V AC or 1000 V DC. With only 4 devices most standard applications can be served. Additionally a version for solar applications with increased earth leakage capacitance has been added.



### Ordering details

| Rated control supply voltage = measuring voltage | Nominal voltage $U_n$ of the distribution system to be monitored | System leakage capacitance, max. | Adjustment range of the specified response value $R_{an}$ (threshold) | Reference code | Catalog number | Weight (1 pce) kg (lb) |
|---|---|---|---|---|---|---|
| 24-240 V AC/DC | 0-250 V AC / 0-300 V DC | 10 µF | 1-100 kW | CM-IWS.1 | 1SVR630660R0100 | 0.133 (0.293) |
| 24-240 V AC/DC | 0-400 V AC | 10 µF | 1-100 kW | CM-IWS.2 | 1SVR630670R0200 | 0.127 (0.280) |
| 24-240 V AC/DC | 0-400 V AC / 0-600 V DC | 20 µF | 1-100 kW 2-200 kW (activated / de-activated by DIP-switch) | CM-IWN.1 | 1SVR650660R0200 | 0.231 (0.509) |
| 24-240 V AC/DC | 0-400 V AC / 0-600 V DC | 1000 µF | | CM-IWN.5 | 1SVR650660R0400 | 0.231 (0.509) |
| Passive device, no control supply voltage needed | 0-690 V AC / 0-1000 V DC | | | CM-IVN | 1SVR650669R9400 | 0.169 (0.373) |

### Ordering details - New range available at 4th quarter of 2012

| Rated control supply voltage = measuring voltage | Nominal voltage $U_n$ of the distribution system to be monitored | System leakage capacitance, max. | Adjustment range of the specified response value $R_{an}$ (threshold) | Reference code | Catalog number | Weight (1 pce) kg (lb) |
|---|---|---|---|---|---|---|
| 24-240 V AC/DC | 0-250 V AC / 0-300 V DC | 10 µF | 1-100 kΩ | CM-IWS.1S | 1SVR730660R0100 | 0.148 (0.326) |
| | | | | CM-IWS.1P | 1SVR740660R0100 | 0.137 (0.302) |
| 24-240 V AC/DC | 0-400 V AC | 10 µF | 1-100 kΩ | CM-IWS.2S | 1SVR730670R0200 | 0.141 (0.311) |
| | | | | CM-IWS.2P | 1SVR740670R0200 | 0.130 (0.287) |
| 24-240 V AC/DC | 0-400 V AC / 0-600 V DC | 20 µF | 1-100 kΩ 2-200 kΩ (activated / de-activated by DIPswitch) | CM-IWN.1S | 1SVR750660R0200 | 0.241 (0.531) |
| | | | | CM-IWN.1P | 1SVR760660R0200 | .217 (0.478) |
| 24-240 V AC/DC | 0-400 V AC / 0-600 V DC | 500 µ | | CM-IWN.4S | 1SVR750660R0300 | 0.241 (0.531) |
| | | | | CM-IWN.4P | 1SVR760660R0300 | 0.217 (0.478) |
| 24-240 V AC/DC | 0-400 V AC / 0-600 V DC | 1000 µF | | CM-IWN.5S | 1SVR750660R0400 | 0.241 (0.531) |
| | | | | CM-IWN.5P | 1SVR760660R0400 | 0.217 (0.478) |
| 24-240 V AC/DC | 0-400 V AC / 0-600 V DC | 2000 µF | | CM-IWN.6S | 1SVR760660R0500 | 0.241 (0.531) |
| | | | | CM-IWN.6P | 1SVR760660R0500 | 0.217 (0.478) |