

PRODUCT ENVIRONMENTAL INFORMATION

Three-phase monitoring relays

CM-PFS



The CM-PFS is used to monitor three-phase mains for incorrect phase sequence and phase failure.

The CM-PFS is a three-phase monitoring relay that is used to monitor three phase mains for incorrect phase sequence and phase failure. This relay operates with a rated control supply voltage / three-phase measuring voltage of 200-500 V AC and has 2 c/o output contacts. Every device is available in two different connection technologies: familiar double-chamber cage connection terminals (screw terminals) and ABB's vibration-resistant Easy Connect technology (push-in terminals).

Product conformity & compliance

REACH (Regulation EC 1907/2006)

CM-PFS three-phase monitoring relay and related accessories were classified as articles and, during normal and reasonably foreseeable conditions of use, do not intentionally release any substance or preparation. ABB continuously undertakes communications throughout its supply chain in order to collect information about suppliers' compliance with REACH regulation.

SVHC (Regulation EC 1907/2006 REACH)

ABB continuously assesses its products for content of Substances of Very High Concern (SVHC), as included in the "Candidate List" by the European Chemicals Agency (ECHA). ABB publishes the data about the products that are having a part with SVHC in the SCIP database.

RoHS II

CM-PFS three-phase monitoring relay and related accessories are within the scope of directive 2011/65/EU (RoHS II) and amendment 2015/863, starting from July 22 2019.

WEEE

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is the European Community directive 2012/19/EU on waste electrical and electronic equipment (WEEE) which, together with the RoHS Directive, became European law in February 2003.

Product safety

Compliance with essential health and safety requirements has been assured by compliance with the applicable product and safety standards.

The validation according to the product and safety standards is carried out by third party tests laboratory (STIEE / TL030) in respect of the EN ISO/IEC 17025 European standard, according to IECCE CB scheme. CB certificate has been issued.

Standards:

- IEC/EN 60947-5-1
- UL 508

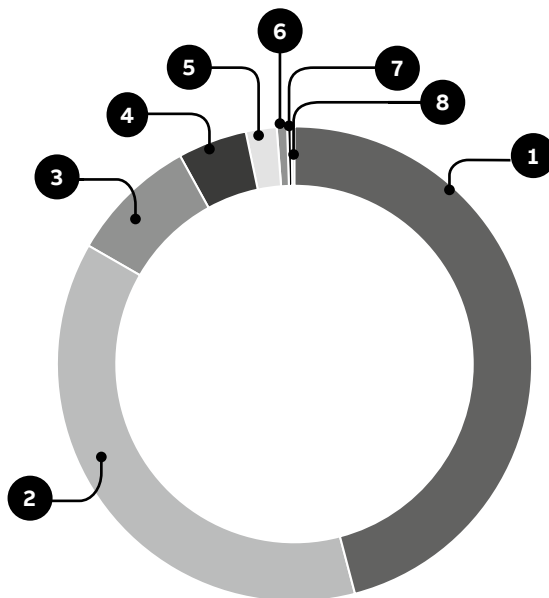
Directives:

- Low Voltage Directive 2014/35/EU
- EMC directive 2014/30/EU
- RoHS Directive 2011/65/EU incl. 2015/863/EU

Material declaration

This section outlines the material composition of CM-PFS.S as representative products for CM-PFS three-phase monitoring relay. The constituent materials are distributed as follows.

Three-phase monitoring relay CM-PFS. The total weight of the product is 123.9 gr.

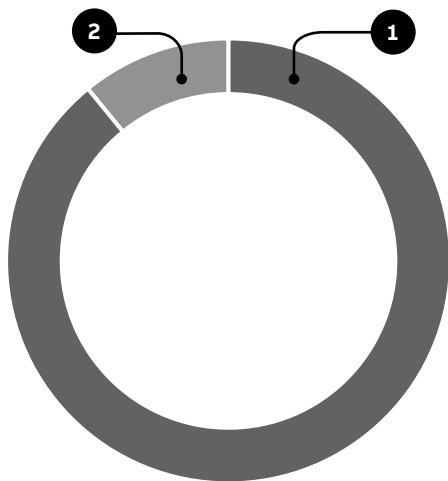


Material	% wt
1 PCBA	45.90 %
2 PA	37.40 %
3 Brass	8.70 %
4 Steel	4.70 %
5 Stainless Steel	2.10 %
6 PC	0.70 %
7 Paper	0.30 %
8 ASA	0.20 %
TOTAL	100 %

Packaging

The charts below provide information for each packaging material used. The cardbox and the paper used for the product material are made of recycled fibers and are 100 % recyclables. The polymer films used are marked with the proper identification code and are recyclable.

Three-phase monitoring relay CM-PFS.S packaging material composition: total weight = 20 gr.



Material	% wt
1 Cardbox	89.1 %
2 Paper	10.9 %
TOTAL	100 %

Product use



Energy

Power losses are indicated in the following table.

Type	Apparent (VA) power at 400 V AC
CM-PFS.S	15

End-of-life

At the end of operating life, constituent components of CM-PFS three-phase monitoring relay have been optimized in order to reduce waste amount and increase recovery of the material. Metals and polymers contained into CM-PFS three-phase monitoring relay are characterized by high recycling rates. Most plastic parts are marked for easy sorting.

ABB STOTZ-KONTAKT GmbH
Eppelheimer Strasse 82
69123 Heidelberg, Germany

abb.com/lowvoltage

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.
Copyright© 2023 ABB
All rights reserved