

PRODUCT ENVIRONMENTAL INFORMATION

Time relays

CT-S



ABB time relays provide simple, reliable and economical control solutions in all types of panels. They are typically used in industrial applications and OEM equipment, providing time-delayed switching to start a motor, control a load or manage a process.

The advanced CT-S range is ABB's universal range of electronic timers. It includes 22 single-function devices and 16 multifunction time relays, offering flexibility in operation with up to 13 functions. The devices feature seven or ten time ranges, adjustable from 0.05 seconds to 300 hours. Additionally, 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)

CT-S time relays 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

CT-S time relays 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 IECEE CB scheme. CB certificate has been issued.

Standards:

- IEC/EN 61812-1
- UL 508

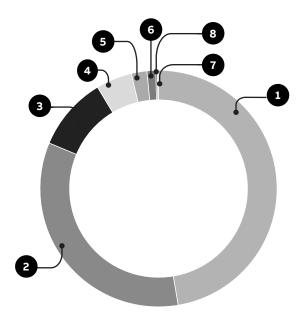
Directives:

- 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 CT-MFS.21S as representative products for CT-S time relays. The constituent materials are distributed as follows.

Time relay CT-MFS.21S. The total weight of the product is 141 gr.

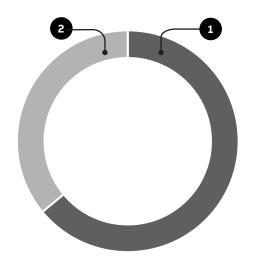


Material		% wt	
0	PCBA	47.4 %	
8	PA	34.0 %	
3	Copper alloys	10.1 %	
4	Steel	4.9 %	
6	Stainless Steel	2.1 %	
6	PC	1.2 %	
0	Paper	0.2 %	
8	ASA	0.1 %	
	TOTAL	100 %	

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.

Time relay CT-MFS.21S packaging material composition: total weight = 27 gr.



Mat	erial	% wt
0	Cardbox	64.0 %
3	Paper	36.0 %
	TOTAL	100 %

Product use

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Energy

Power losses are indicated in the following table.

Туре	Power (W) consumption	Apparent (VA) power
Time relay CT-MFS.21S	0.8	2.7

End-of-life

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

