PRODUCT ENVIRONMENTAL INFORMATION

Low voltage circuit breaker
SACE Tmax T7

SACE Tmax T7 is a highly advanced low voltage moulded case circuit-breaker with unparalleled versatility of use and able to solve all installation problems brilliantly and respond successfully to all plant engineering requirements, from standard ones to the most technologically advanced ones.

SACE Tmax T7 can be found in the three-pole and four-pole, fixed and withdrawable versions, fitted with the very latest generation electronic trip units, with the possibility of interchangeability.
SACE Tmax T7 set up a new technological standard and leave you free to think up and build installations with extraordinary performances.
The present document applies to products made in Italy and manufactured in Frosinone plant.
This manufacturing site is certified according to ISO 9001, IRIS, ISO 14001, OHSAS 18001 and SA 8000.

Product Conformity & Compliance

REACh (Regulation EC 1907/2006)
SACE Tmax T7 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 SACE 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 SACE 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).

RoHS II
SACE Tmax T7 and related accessories are within the scope of Directive 2011/65/EU (RoHS II) starting from July 2019. However, according to our best knowledge, SACE Tmax T7 and related accessories do not contain any of the restricted substances listed into RoHS II directive.

WEEE
SACE Tmax T7 and related accessories are included in the scope of Directive 2012/19/EU, starting from August 15th 2018.

Product Safety
Certification of conformity with the product Standards is carried out in the ABB SACE tests laboratory (accredited by ACCREDIA) in respect of UNI CEI EN ISO /IEC 17025 Standard, by the Italian certification body ACAE (Association for Certification of Electrical Apparatus), member of the European LOVAG organization (Low Voltage Agreement Group) and by the Swedish certification body Intertek Semko, belonging to the international IECEE organization.

Standard:
- IEC 60947-2.

Directives:
- EC “Low Voltage Directive” (LVD) 2014/35/EC
- EC “Electromagnetic Compatibility Directive” (EMC) 2014/30/EC.

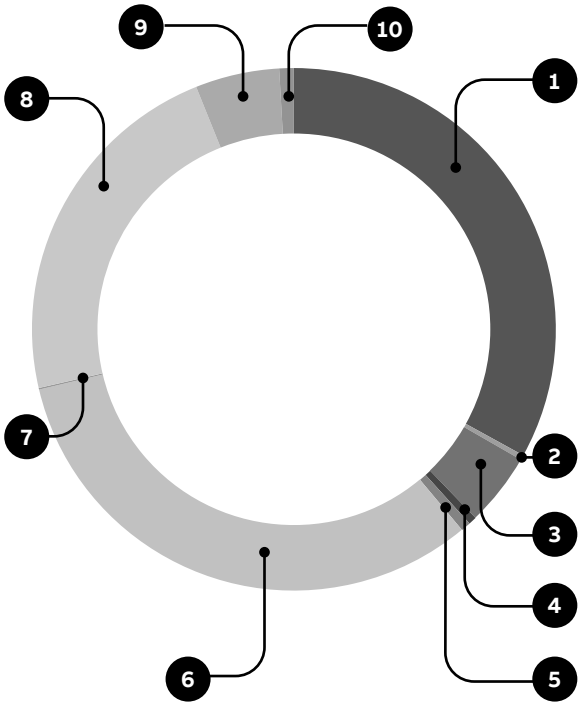
Naval Registers:
- Lloyd’s Register of Shipping, Germanischer Lloyd, Bureau Veritas, Rina, Det Norske Veritas, Russian Maritime Register of Shipping, ABS.

Certifications and awards

Material declaration

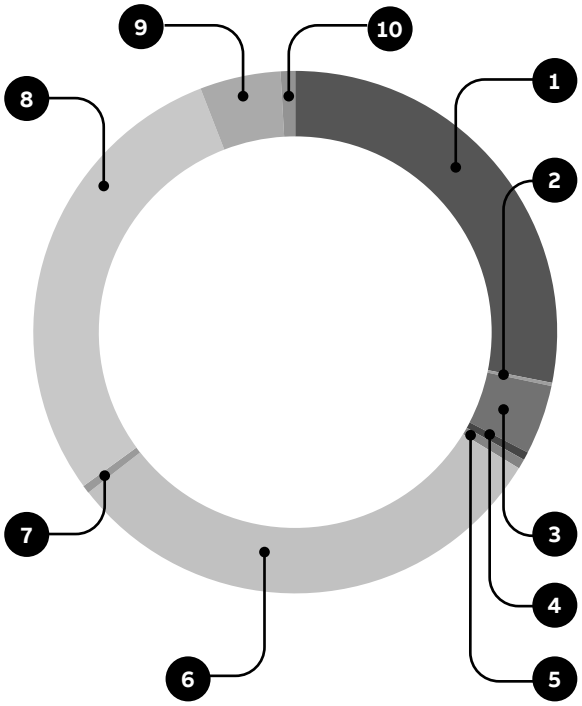
The charts below show the constituents of Tmax T7 3-poles. The costituent materials are distributed as follows.

Tmax T7 with independent manual closing.
The total weight of the product is 12.205 gr.



Material		% wt
1	BMC	33,0%
2	PET	0,3%
3	PC	4,5%
4	PA	0,5%
5	Precious metals	0,6%
6	Copper-copper alloys	32,4%
7	Stainless steel	0,1%
8	Steel	22,5%
9	Other	5,2%
10	Electronic board	0,9%
	TOTAL	100,0%

Tmax T7-M with independent power closing.
The total weight of the product is 12.809 gr.

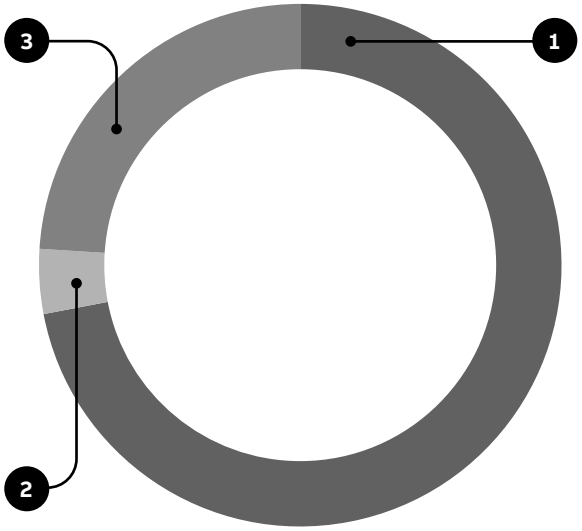


Material		% wt
1	BMC	28,1%
2	PET	0,2%
3	PC	4,3%
4	PA	0,5%
5	Precious metals	0,6%
6	Copper-copper alloys	30,8%
7	Stainless steel	0,5%
8	Steel	29,1%
9	Other	5,0%
10	Electronic board	0,9%
	TOTAL	100,0%

Packaging

The total weight for Tmax T7 packaging material is 1250 grams. The chart provides information for each packaging material used.
The polymer films used are marked with the proper identification code and are recyclable.

Tmax T7 packing material composition



Material		%
1	Cardbox	72%
2	Plastic	4%
3	Wood	24%
	TOTAL	100%

Product Use

Energy
Power loss for Tmax T7 equipped with thermal magnetic release is equal to 77 W per pole.
These values represent about 0.01% of the total power flowing through Tmax T7 breaker.
The energy consumption during the use of Tmax T7 has been extimated assuming 20 years of continual operation with a 30% load rate and 100% operation time.

Energy consumption = 3642 KWh.

End-of-life

At the end of operating life, constituent components of Tmax T7 have been optimized in order to reduce waste amount and increase recovery of the material.
Metals and polymers contained into SACE Tmax T7 are characterized by high recycling rates . Most of plastic parts are marked for easy sorting.
The recyclability potential of the product has been evaluated using IEC / TR 62635. According to this standard, the potential recyclability ratio is 80%.

ABB SACE
Electrification Products Division
Protection & Connection
5, Via Pescaria
I-24123, Bergamo - Italy
Phone: +39 035 395.111

www.abb.com

1SDL000192R0003 2021.02