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Data sheet 3MU7410-3CA1

CT operated Thermal OLR RANGE 160-250A Class 10A

product brand name	SINOVA
product designation	Thermal overload relay CT operated
product type designation	3MU7
General technical data	
size of overload relay	Size 4
power loss [W] for rated value of the current at AC in hot operating state	33.6 W
● per pole	11.2 W
insulation voltage with degree of pollution 3 at AC rated value	1 000 V
surge voltage resistance of main circuit rated value	8 kV
shock resistance according to IEC 60068-2-27	8 g / 10 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (day/month/year)	11/07/2022
Net Weight	1.6 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
● during operation	-5 ... +55 °C
● during storage	-25 ... +70 °C
temperature compensation	-5 ... +55 °C
relative humidity during operation	10 ... 95 %
Main circuit	
number of poles for main current circuit	3
type of voltage for main current circuit	AC
operating voltage	
● rated value	400 V
● at AC-3 rated value maximum	400 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	250 A
operational current at AC-3 at 400 V rated value	250 A
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
● note	for contactor disconnection
number of NO contacts for auxiliary contacts	1
● note	for message "Tripped"
operational current of auxiliary contacts at AC-15	
● at 24 V	2 A
● at 110 V	1.25 A
● at 690 V	0.3 A

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operational current of auxiliary contacts at DC-13	
● at 24 V	1 A
● at 110 V	0.22 A
● at 220 V	0.1 A
Short-circuit protection	
design of the fuse link	
● for short-circuit protection of the main circuit with type of coordination 2 required	gG: 355 A, Type-2 co-ordination
● for short-circuit protection of the auxiliary switch required	fuse gG: 6 A
Installation/ mounting/ dimensions	
mounting position	22.5° Inclination forward and backward & ± 90° rotation, in relation to normal vertical mounting plane
fastening method	Stand-alone installation by screw fixing
height	157 mm
width	147 mm
depth	173 mm
Connections/ Terminals	
type of electrical connection	
● for main current circuit	screw-type terminals
● for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts	
● finely stranded with core end processing	2x (70 ... 240 mm²)
type of connectable conductor cross-sections for auxiliary contacts	
● solid or stranded	2x (1 ... 2.5 mm²)
● finely stranded with core end processing	2x (0.75 ... 1.5 mm²)
tightening torque	
● for main contacts with screw-type terminals	14 ... 24 N·m
● for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m
design of the thread of the connection screw	
● for main contacts	M10
● of the auxiliary and control contacts	M3.5
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00
touch protection on the front according to IEC 60529	finger-safe for auxillary contacts on the front
Display	
display version for switching status	Trip indicator

Approvals Certificates

Environment	General Product Approval	other
Environmental Confirmations	CE EG-Konf.	Confirmation

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3MU7410-3CA1
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3MU7410-3CA1
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MU7410-3CA1&lang=en
Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3MU7410-3CA1
Characteristic curves
https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod__no>

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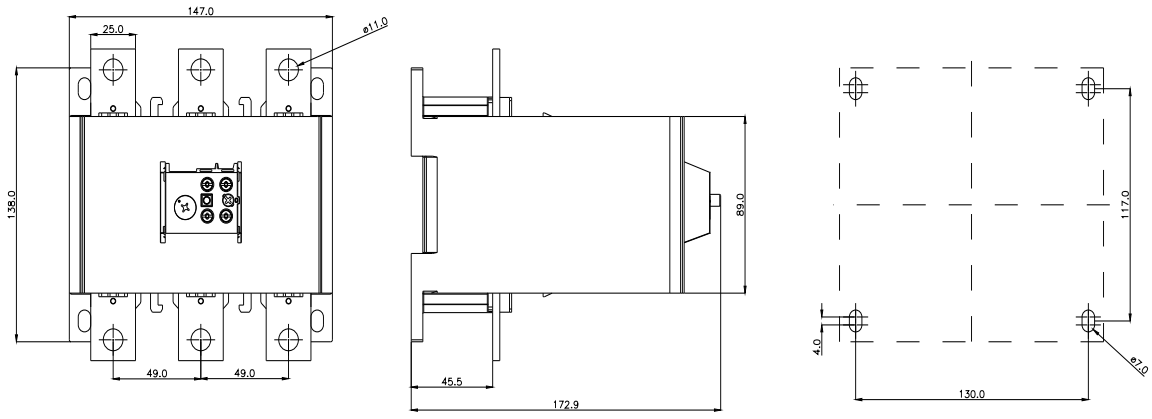

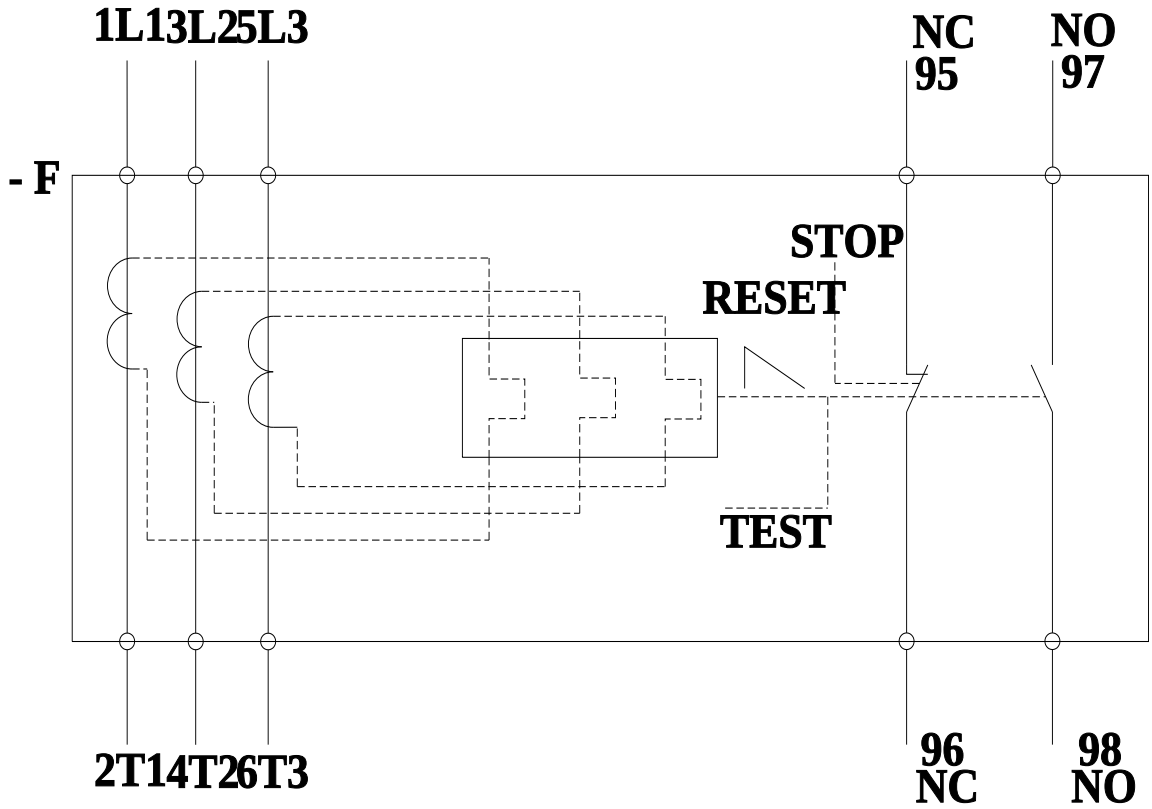

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