



Thermal overload relay RANGE 63-80A Class 10 For mounting on 3MT7 contactors Size 3,4 Main circuit: Screw Auxiliary circuit: Screw Manual Automatic reset

product brand name	SINOVA
product designation	Thermal overload relay
product type designation	3MU7
General technical data	
size of overload relay	Size 3
size of contactor can be combined company-specific	3MT7 Size 4
power loss [W] for rated value of the current at AC in hot operating state	24.6 W
• per pole	8.2 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance of main circuit rated value	6 kV
shock resistance according to IEC 60068-2-27	15 g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (day/month/year)	07/01/2022
Net Weight	0.448 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	690 V
• at AC-3 rated value maximum	690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	80 A
operational current at AC-3 at 400 V rated value	80 A
operating power at AC-3	
• at 400 V rated value	37 kW
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 • at 110 V • at 690 V	4.17 A 3.64 A 0.7 A		
operational current of auxiliary contacts at DC-13 • at 24 V • at 110 V • at 220 V	4.17 A 0.45 A 0.2 A		
Short-circuit protection			
design of the fuse link • for short-circuit protection of the main circuit with type of coordination 2 required • for short-circuit protection of the auxiliary switch required	gG: 125 A, Type-2 co-ordination fuse gG: 10 A		
Installation/ mounting/ dimensions			
mounting position	22.5° Inclination forward and backward & ± 90° rotation, in relation to normal vertical mounting plane		
fastening method	Contactormounting		
height	79.5 mm		
width	70 mm		
depth	115 mm		
Connections/ Terminals			
type of electrical connection • for main current circuit • for auxiliary and control circuit	screw-type terminals screw-type terminals		
type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing	1x (4 ... 35 mm²) 1x (2.5 ... 35 mm²)		
type of connectable conductor cross-sections for auxiliary contacts • solid or stranded • finely stranded with core end processing	1x (1 ... 4 mm²) 1x (1 ... 4 mm²)		
tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	9 N·m 1.2 N·m		
design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts	M10 M3.5		
Electrical Safety			
protection class IP on the front according to IEC 60529	IP20		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front		
Display			
display version for switching status	Trip indicator		
Approvals Certificates			
Environment	General Product Approval	Test Certificates	other

[Environmental Conformations](#)



[Type Test Certificates/Test Report](#)

[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=3MU7310-2FA0>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3MU7310-2FA0>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

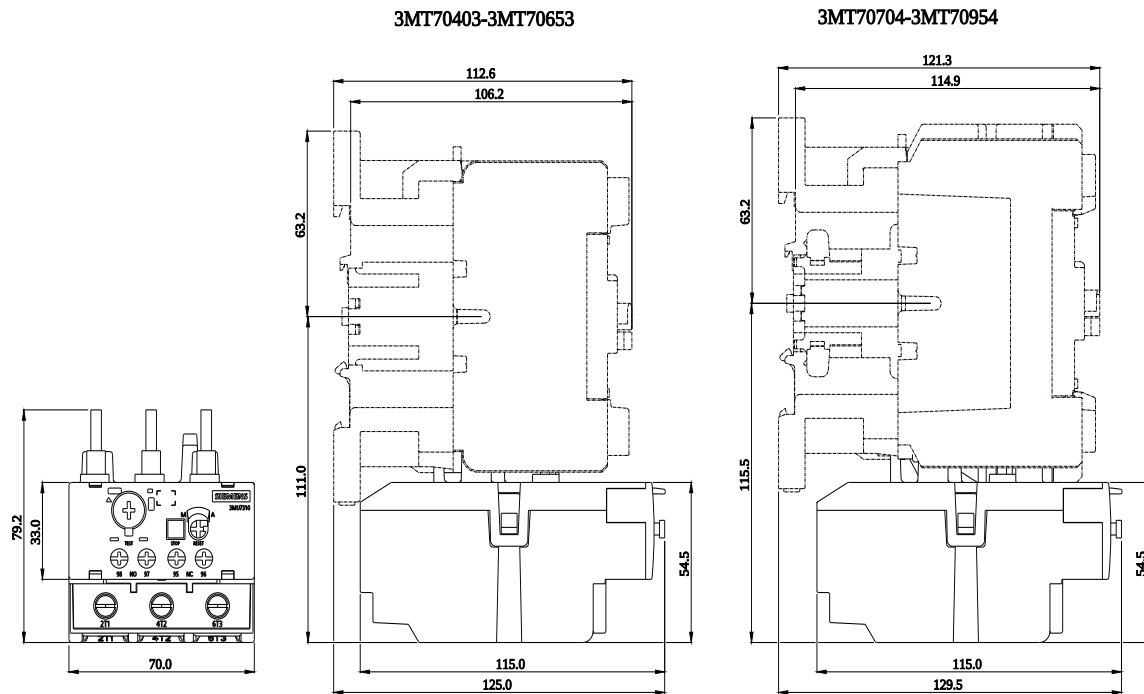
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MU7310-2FA0&lang=en

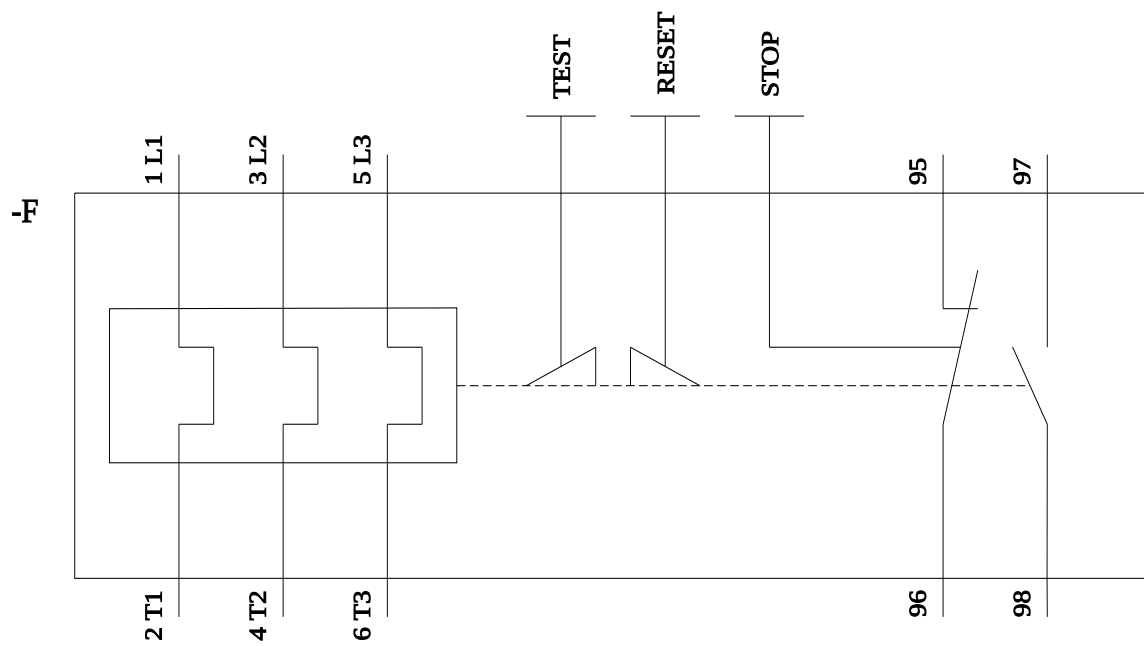
Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3MU7310-2FA0>

Characteristic curves

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last modified:

4/4/2026 