



Thermal overload relay RANGE 37-50A 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 3, 4
power loss [W] for rated value of the current at AC in hot operating state	21.6 W
• per pole	7.2 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	15g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	07/01/2022
Weight	0.491 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	50 A
operational current at AC-3 at 400 V rated value	50 A
operating power at AC-3	
• at 400 V rated value	22 kW
• at 690 V rated value	45 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	

<ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• for short-circuit protection of the main circuit with type of assignment 2 required• for short-circuit protection of the auxiliary switch required	gG: 80 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	Contactor mounting		
height	79.5 mm		
width	70 mm		
depth	115 mm		
Connections/ Terminals			
type of electrical connection <ul style="list-style-type: none">• for main current circuit• for auxiliary and control circuit	screw-type terminals screw-type terminals		
type of connectable conductor cross-sections for main contacts <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• solid or stranded• finely stranded with core end processing	1x (1 ... 4 mm²) 1x (1 ... 4 mm²)		
tightening torque <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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			
General Product Ap- proval	Test Certificates	other	Environment



[Type Test Certificates/Test Report](#)

[Confirmation](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3MU7310-2CA0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3MU7310-2CA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3MU7310-2CA0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3MU7310-2CA0&lang=en

Characteristic: Tripping characteristics, I_t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3MU7310-2CA0/char>



