CONTENT

3-phase Under & Over-Voltage delayed relays V3Y

self-powered protection available in:
Hx4 module, system Combiflex
or in unit H4 for surface mounting

CONTENT..... 1

ORDERING CODE, PRICE 2

DESCRIPTION of Hx4 Combiflex model 3

CONNECTION AND DIMENSIONS for Hx4 Combiflex model 4

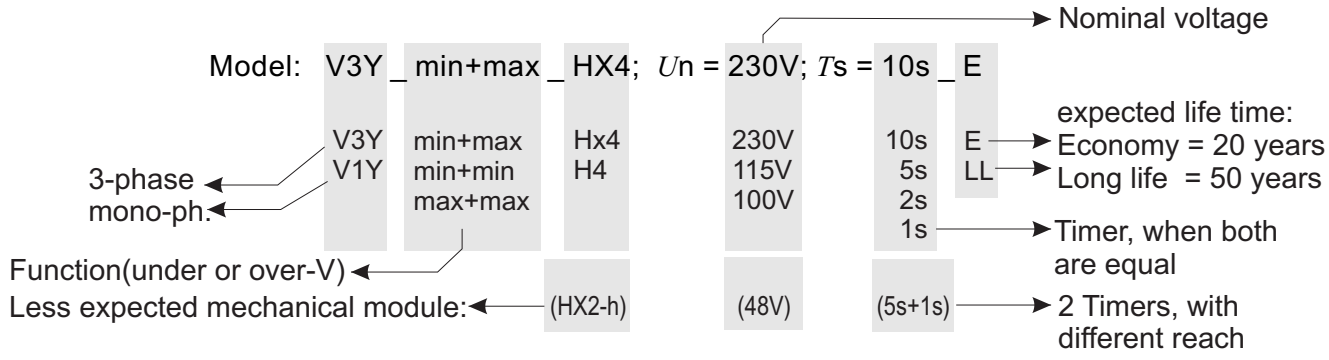
DESCRIPTION of H4 model for surface mounting 5

CONNECTION AND DIMENSIONS for H4 model for surface mounting 6

TECHNICAL DATA 7

Place and date of issue: Medvode, 05. 03. 2012

ORDERING CODE EXPLANATION

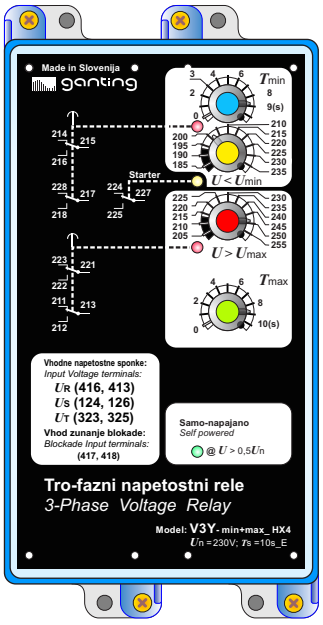


PRICE

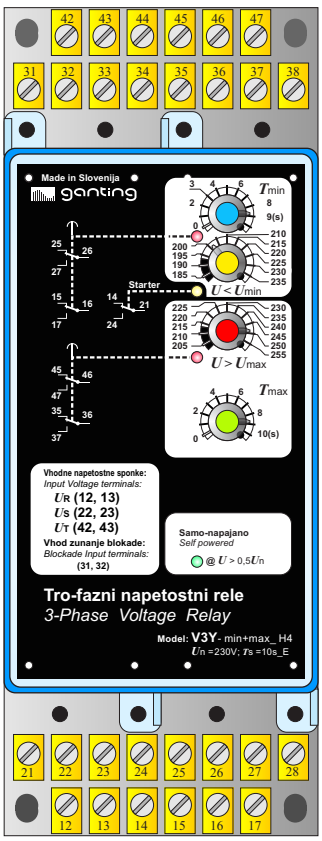
Note: Bellow listed Prices are subjected to influence of payment conditions and the delivery request.
Price does not include tax.

Ordering Code	Setting Range	Price €/pcs @ ordered quantity			
		1	2	4	8
V3Y- min+max_HX4 Un = 230V; Ts = 10s_E	(185-255)V	390	370	351	333
V3Y- min+max_H4 Un = 230V; Ts = 10s_E					

Model:
V3Y- min+max_HX4
Un = 230V; Ts = 10s_E



Model:
V3Y- min+max_H4
Un = 230V; Ts = 10s_E



DESCRIPTION
self-powered protection available in
Hx4 module, system Combiflex

Model: V3Y-min+max_HX4
Un =230V; T =10s_E

Blue knob: Tmin
for setting of time delay of under-voltage measuring unit.

Red LED lamp:
state of Output relay of under-voltage, indicating run out of timer Tmin.

Yellow knob: $U < U$min
for setting the minimum permissible value of under-voltage measuring unit.

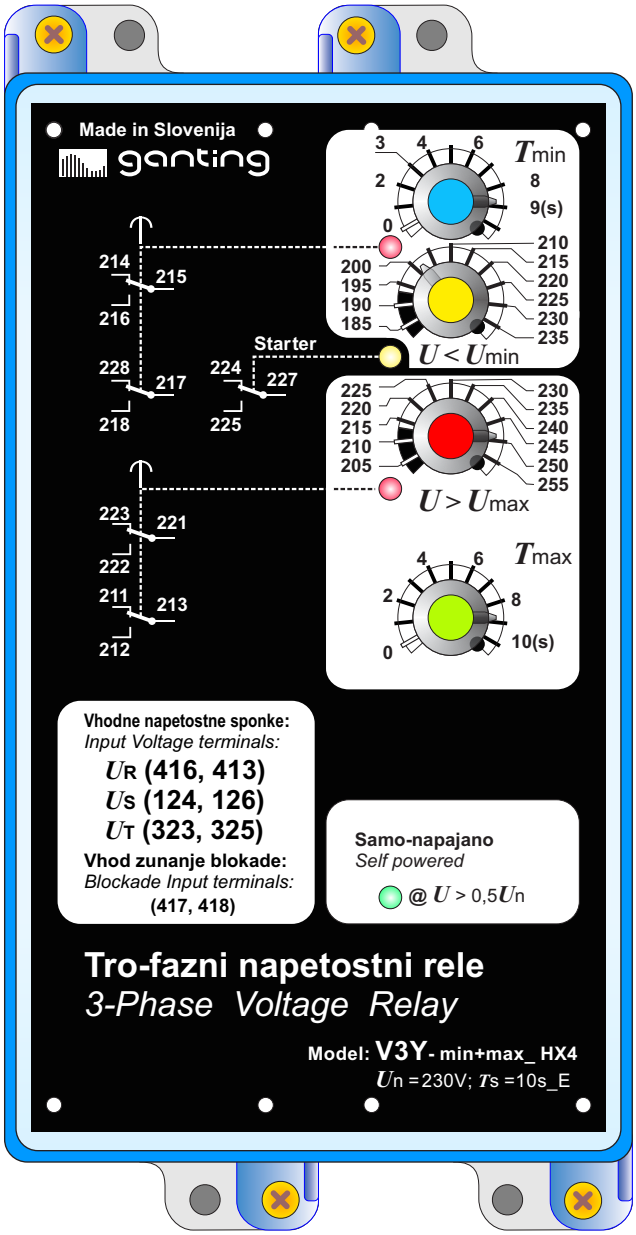
Yellow LED lamp of Starter:
state of Starter´s relay,
indicating either start of comparator for under-voltage $U < U$min or start of comparator for over-voltage $U > U$max.

Red knob: $U > U$max
for setting the maximum permissible value of over-voltage measuring unit.

Red LED lamp:
state of Output relay of over-voltage, indicating run out of timer Tmax.

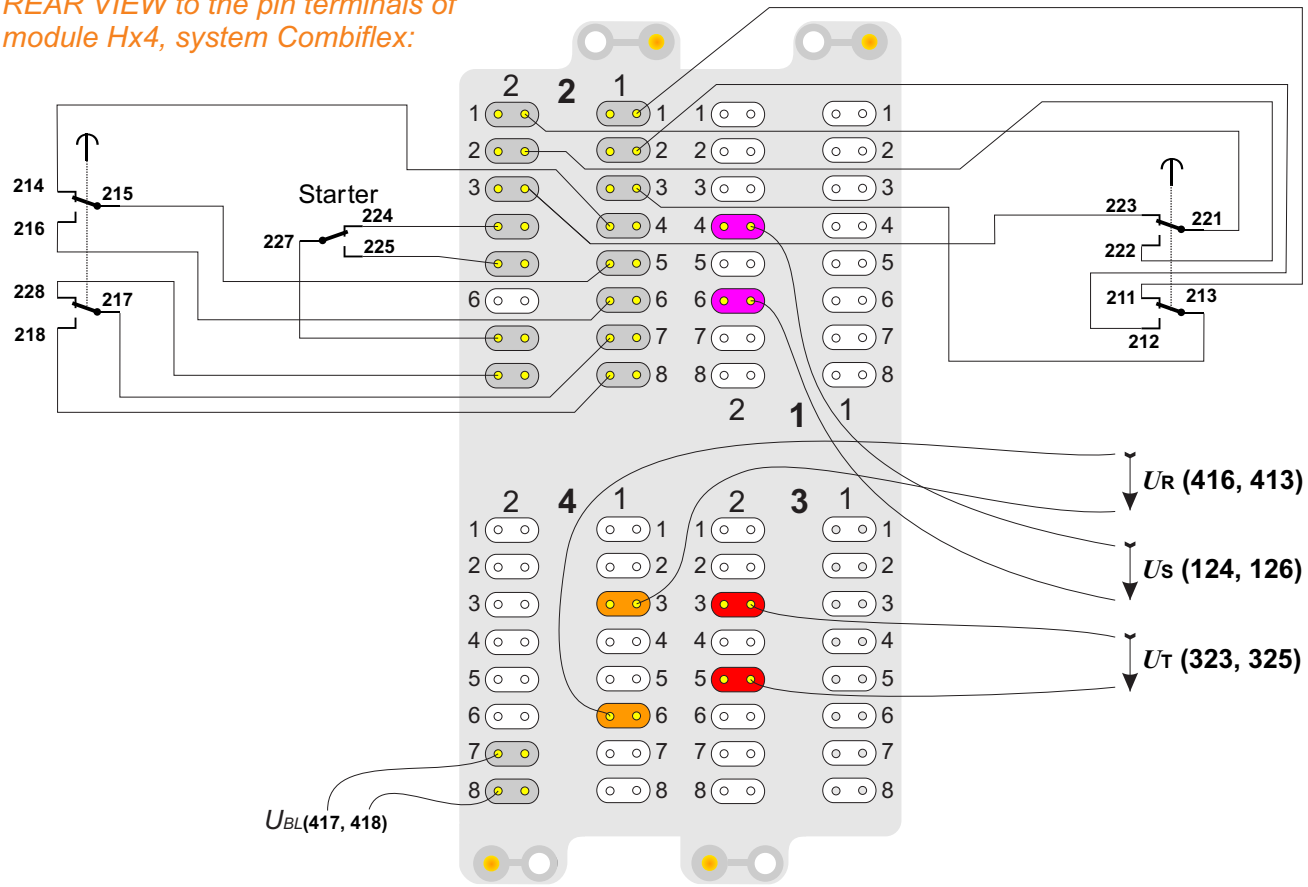
Green knob: Tmax
for setting of time delay of over-voltage measuring unit.

Green LED lamp: @$U > U$n
indicating the ability of self-powering, which is sufficient, if at lest one of presenting phase is greater than 50% of nominal input value Un.

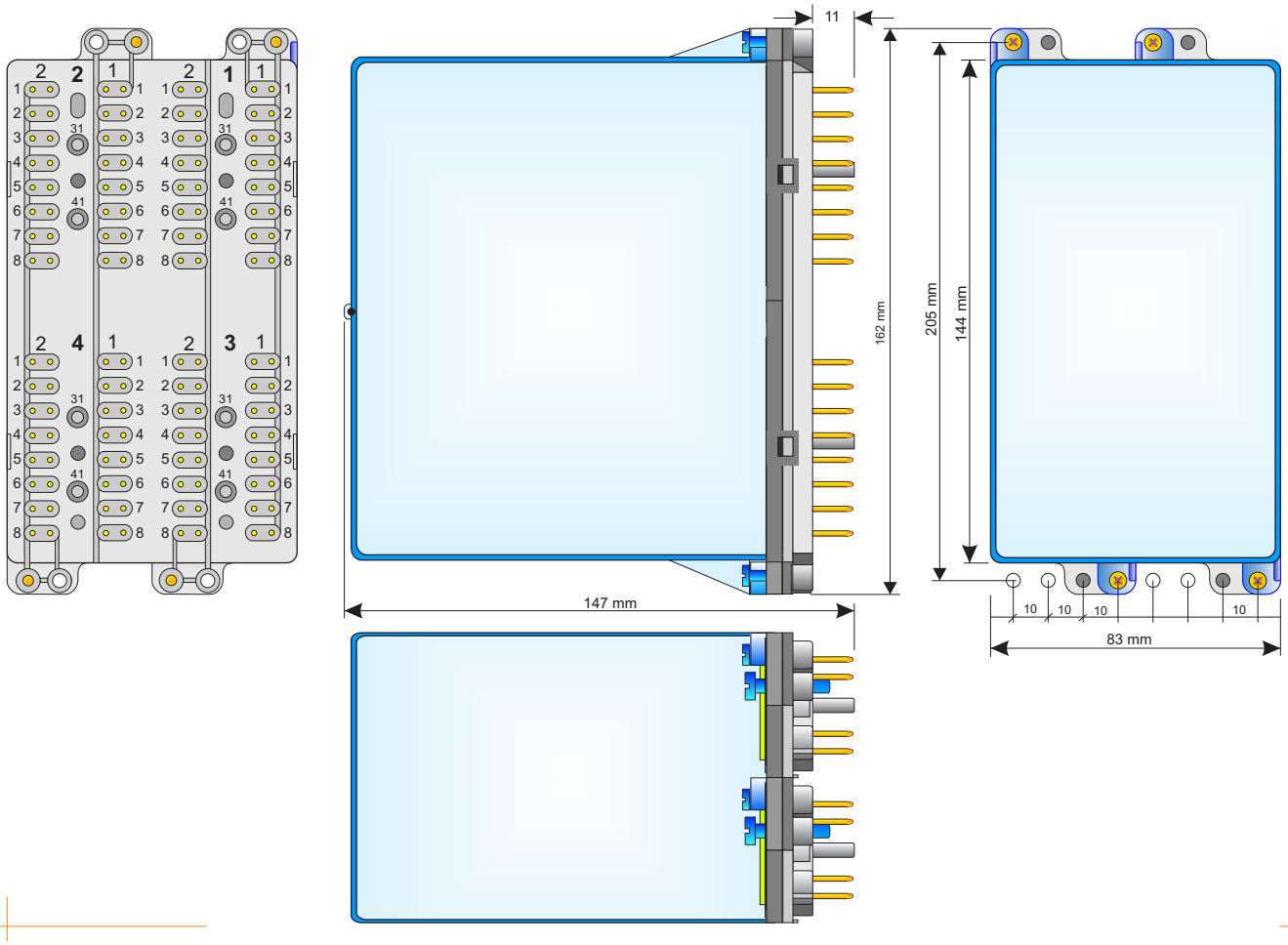


CONNECTION AND DIMENSIONS
self-powered protection available in Hx4 module, system Combiflex

REAR VIEW to the pin terminals of module Hx4, system Combiflex:



DIMENSIONS of Hx4 module:



DESCRIPTION
self-powered protection available in unit H4 for surface mounting

Model: V3Y- min+max_H4
Un = 230V; Ts = 10s

Blue knob: Tmin
for setting of time delay of under-voltage measuring unit.

Red LED lamp:
state of Output relay of under-voltage, indicating run out of timer Tmin.

Yellow knob: $U < U$min
for setting the minimum permissible value of under-voltage measuring unit.

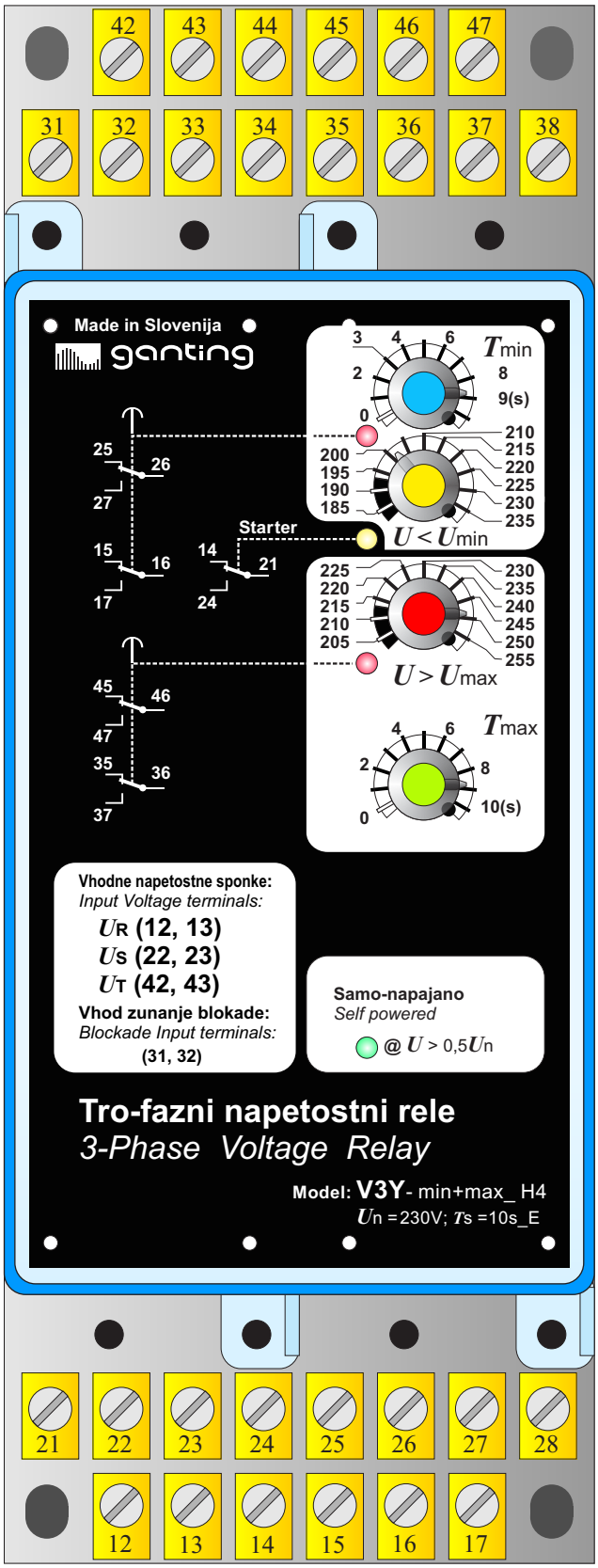
Yellow LED lamp of Starter:
state of Starter´s relay, indicating either start of comparator for under-voltage $U < U$min or start of comparator for over-voltage $U > U$max.

Red knob: $U > U$max
for setting the maximum permissible value of over-voltage measuring unit.

Red LED lamp:
state of Output relay of over-voltage, indicating run out of timer Tmax.

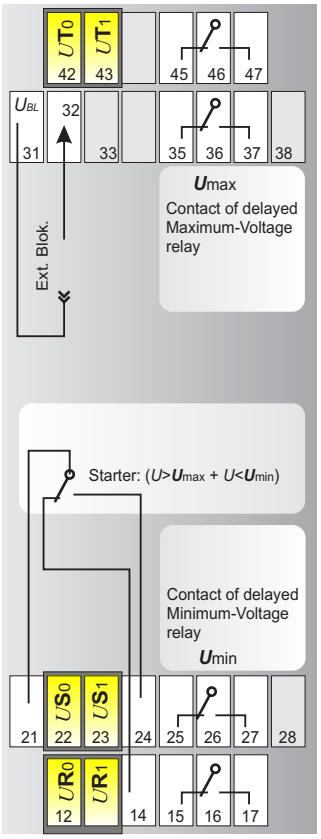
Green knob: Tmax
for setting of time delay of over-voltage measuring unit.

Green LED lamp: @$U > U$n
indicating the ability of self-powering, which is sufficient, if at lest one of presenting phase is greater than 50% of nominal input value Un.

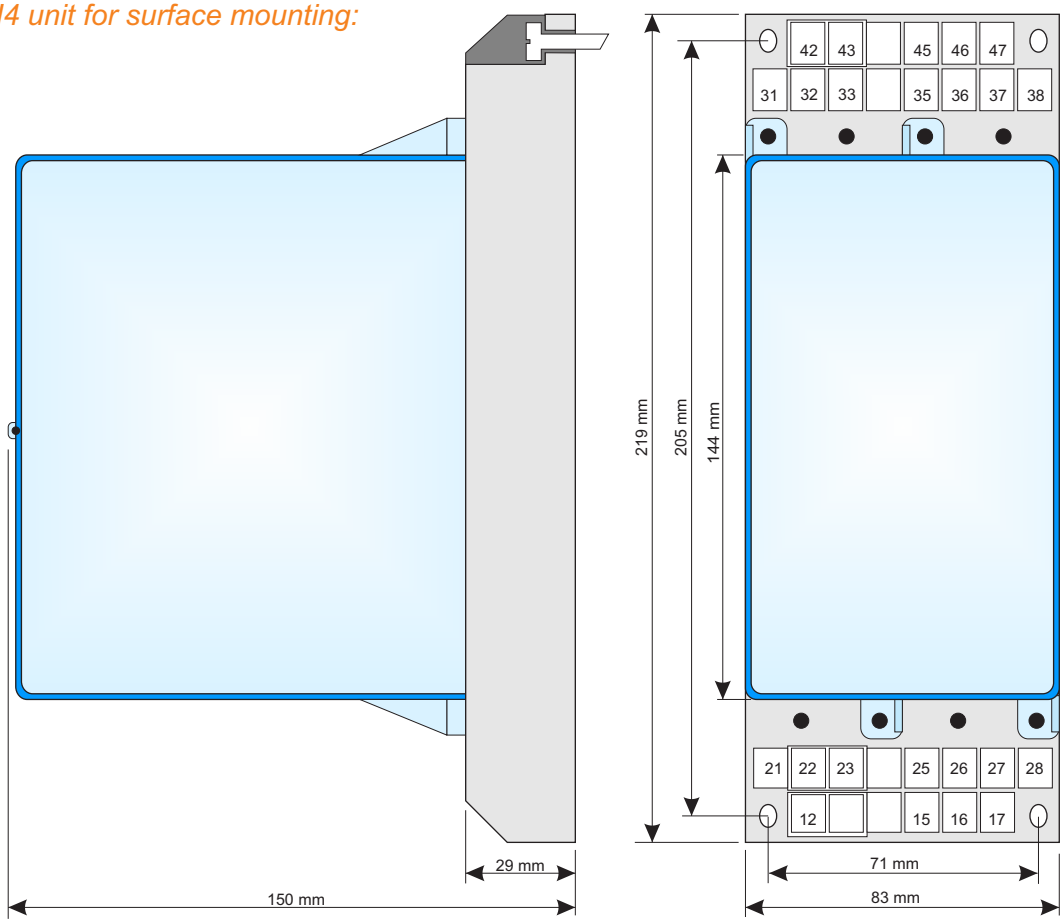


CONNECTION AND DIMENSIONS
self-powered protection available in unit H4 for surface mounting

TOP VIEW to the screw terminals of unit H4:



DIMENSIONS of H4 unit for surface mounting:



TECHNICAL DATA
self-powered protection available in:
Hx4 module, system Combiflex
or in unit H4 for surface mounting

Parameter		***Min.***	***Nom.***	***Max.***	***Unit***	***Conditions*** @ T_{Amb} = 20°C
Nominal voltage	U_n		230 115 100		V V V	40Hz or 66Hz
Nominal frequency	f_n		50 60		Hz Hz	
Under-voltage relay Setting range Repetition accuracy Reset Ratio (pick-up\drop-out)	U_{min}	185	 2 95	235	 V % %	 @U_n = 230V of scale range of full scale
Over-voltage relay Setting range Repetition accuracy Reset Ratio (pick-up\drop-out)	U_{max}	205	 2 95	255	 V % %	 @U_n = 230V of scale range of full scale
Timer for under-V relay or **Timer for over-V** relay Nominal delay scale reach Time delay setting range	T_{min} T_{max} 100%	 5	 	 1; 2; 5; and 10; 100	 s s %	 chosen by order of 100% of scale reach
Repetition accuracy Reset Time		 50	2 66	 130	% ms	(10 -100)% of scale reach Recovery done
Self-powering from		63 50			%U_n %U_n	supplied from single phase supplied from all 3 phases
Power dissipation nominal-released state	P_{no}			0,55	W	per one Phase U = U_n, @ all relays are OFF;
nominal, ON state	P_{n1}			1,2 2,55	W W	U = U_n, @ all relays are ON; U = 1,5U_n, @ all relays are ON;
Ambient Temperature Storage Temperature	T_{Amb}	-10 +5 -25		+55 +45 +75	°C °C °C	 operating range standard accuracy
Contact rating: Making capability Breaking capacity - d.c. D.c. Breaking capacity via arc suppressor				8 0,05 5	 A A A	 L/R < 20 ms; 100V d.c. L/R < 40 ms; 264V d.c.
Test Voltage (50Hz; 1min.)				2,5	kVrms	between all d.c. separated circuits