

TH-A

- POWER CONTROLLER UP TO 1450 KVA
- TO CONTROL THE POWER OF HEATING ELEMENTS WITH HIGH / LOW TEMPERATURE COEFFICIENT



FEATURES

PRODUCT DESCRIPTION

TH-A

The Thyristor power controller (SCR) TH-A, is used to transfer the required power to the load with precision, high reliability and speed, thanks to digital control technology evolved. The rational design and functionality of the controller TH-A, allow to satisfy a very wide range of applications.

In the standard processes, the ductility, characterized by simple setting accessible to any user, provides quick and easy start-up. With the use of any fieldbus, many other functions enable to elevate the application range to significant tops. All electrical measurements, operating status and set point can be set and interrogated continuously, in aid of the automation process.

TH-A becomes your perfect partner, raising the value of your application, in many fields, such as:

- Automotive (painting and drying / drying);
- Chemicals and Petrochemicals (Pipe Heating, heating and pre-heating in general);
- Industrial Furnaces and not, of any type and power;
- Production and processing of glass (merger; flat glass, wire, forming, finishing, fiberglass ...);
- Manufacturing Industry (extruders, plastic presses);
- Packaging (thermoforming);
- Printing, Graphics (standard dryers, with IR or UV.);
- Coating and Vacuum Coating

GENERAL

Rated voltage	230 (1A), 400, 500, 600 VAC (-5%... +10%)
Rated current	16, 30, 45, 60, 100, 130, 170, 280, 350, 495, 650, 1000, 1400, 1500 A
Functioning mode	Pulse full wave at variable cycle time (TAKT mode), half-wave pulses without component, continues QUICK TAKT (QTM - 1A only), phase angle (no 2A) (VAR mode)
Control input	0/4...20 mA (R_i 250 Ω), 0/1...5 V (R_i 44 k Ω), 0/2...10 V (R_i 88 k Ω), potentiometer: 5...10 k Ω
Protection	Integrated
Diagnostics	LED
Type of load	Resistive, with transformer, at high temperature coefficient (6: 1) R_h/R_c
Power circuit connection	Single phase (1A), three-phase with 2 controlled phases (2A), with 3 controlled phases (3A)
Operating temperature	Up to 170 A: -10... + 45 °C (natural ventilation), 280 A: -10... + 35 °C (forced cooling)
Serial communication (optional)	Modbus RTU, PROFIBUS DPV1, Ethernet, CANopen, DeviceNet
Dimensions	(W x H x D): from 45 x 136 x 129 a 583 x 685 x 516 mm depending on the power
Compliance	CE, UL

HOW TO ORDER

To compose the part number, pls. choose one of the option for each variable

TH- VERSION	CODE
Single Phase (Phase-Neutral; Phase-Phase) Operating modes: TAKT, VAR, QTM, VT	1A
Three-phase connection passing phase Operating Mode: TAKT	2A
Three-phase pure Operating modes: TAKT, VAR, VT	3A
RATED VOLTAGE	
230 V	230
400 V	400
500 V	500
600 V - TH-A...H RL1 - ...H RPL1 only	600
RATED CURRENT	
Pls. specify a value between 16 and 1500 A	----
TYPE	
Standard functions + semiconductor fuse	H3
Standard functions + semiconductor fuse + relay alarm + load monitoring + analogue output	HRL3
Std functions + semiconductor fuse + relay alarm + load monitoring + analogue out + meas. power	HRLP3
Standard functions + semiconductor fuse + forced ventilation	HF3
Std functions + semiconductor fuse + relay alarm + forced ventilation + load monitoring + analogue out + power measurement	HFRL3
Functions as above but with power control	HFRLP3

Note: NOT all combinations are possible.
For more details please contact our sales department.

TECHNICAL DATA TH-2A

CURR (A)	POWER (KW)				DISS. (W)	DIMENSIONS			WGH (KG)	
	230 V	400 V	500 V	600 V		L	H	D		
16	-	11	14	-	60	90	131	127	1.4	
30	-	21	26	-	94	90	131	127	1.4	
45	-	31	39	-	96	104	190	182	3.4	
60	-	42	52	-	160	104	190	182	3.4	
100	-	69	87	-	210	150	190	190	3.8	
130	-	90	112	-	300	250	320	237	8	
170	-	118	147	-	420	250	320	237	8	
..F..	280	-	194	242	-	660	250	393	237	11
..F..	350	-	242	303	-	780	250	430	261	16.7
..F..	495	-	343	429	514	1206	194	380	345	22
..F..	650	-	450	563	675	1453	194	380	345	22
..F..	1000	-	693	866	1039	2811	417	685	516	54
..F..	1400	-	-	1212	1454	3451	417	685	516	54
..F..	1500	-	1039	-	-	3531	417	685	516	54

TECHNICAL DATA TH-1A

CURR (A)	POWER (KW)				DISS. (W)	DIMENSIONS			WGH (KG)	
	230 V	400 V	500 V	600 V		L	H	D		
16	3.7	6.4	8	-	30	45	131	127	0.7	
30	6.9	12	15	-	47	45	131	127	0.7	
45	10	18	22.5	-	48	52	190	182	1.7	
60	14	24	30	-	80	52	190	182	1.7	
100	23	40	50	-	105	75	190	190	1.9	
130	30	52	65	-	150	125	320	237	4	
170	39	68	85	-	210	125	320	237	4	
..F..	280	64	112	140	-	330	125	370	237	5
..F..	350	80	140	175	-	390	125	400	261	8.4
..F..	495	-	198	247	297	603	112	414	345	15
..F..	650	-	260	325	390	726	112	414	345	15
..F..	1000	-	400	500	600	1396	239	729	516	35
..F..	1400	-	-	700	840	1815	239	729	516	35
..F..	1500	-	600	-	-	1855	239	729	516	35

TECHNICAL DATA TH-3A

CURR (A)	POWER (KW)				DISS. (W)	DIMENSIONS			WGH (KG)	
	230 V	400 V	500 V	600 V		L	H	D		
16	-	11	14	-	90	135	132	127	2.1	
30	-	21	26	-	141	135	132	127	2.1	
45	-	31	39	-	144	156	190	182	5.1	
60	-	42	52	-	240	156	190	182	5.1	
100	-	69	87	-	315	225	190	190	5.7	
130	-	90	112	-	450	375	320	241	12	
170	-	118	147	-	630	375	320	241	12	
..F..	280	-	194	242	-	990	375	397	241	15
..F..	350	-	242	303	-	1170	375	430	261	25.5
..F..	495	-	343	429	514	1822	276	407	345	30
..F..	650	-	450	563	675	2192	276	407	345	30
..F..	1000	-	693	866	1039	4127	583	685	516	74
..F..	1400	-	-	1212	1454	5086	583	685	516	74
..F..	1500	-	1039	-	-	5206	583	685	516	74