

TH-PX

- HIGH PERFORMANCE POWER CONTROLLERS
- TO CONTROL THE POWER OF HEATING ELEMENTS WITH HIGH / LOW TEMPERATURE COEFFICIENT

FEATURES



PRODUCT DESCRIPTION

TH-P

TH-PX is the most advanced controller of the range, born of forty years' experience of AEG in the control of electrical power.

Starting from different operation modes, through the multiple connections available for the process and automation systems and using the extreme accuracy guaranteed by the 32-bit RISC processor, TH-PX, in fact, redefines the standard of SCR Power Controllers.

The power controller TH-P can be used anywhere you need precise control of voltage, current or power. With the use of the patented mode dASM, multiple controllers TH-PX can be synchronized to intelligently reduce absorption peaks obtained from the mains.

Despite the completeness, its simple use makes it suitable for a wide range of applications, such as:

- Production and processing of glass (melting, glass, forming, finishing, glass fiber ...);
- Industrial furnaces of any type and power;
- Engineering;
- Coating processes and printing;
- Chemicals and petrochemicals;
- Pharmaceutical Industry;
- Automotive (painting and drying);
- Manufacturing Industry (extruders, plastic presses);
- Pipe Heating, Heaters;
- Heating and Drying UV and IR;
- Industrial Packaging (thermoforming).

The parameters are divided in simple menu; the set point and the measured variables are transmitted back from the analog outputs or the numerous optional fieldbus.

Moreover, thanks to the continuous development of SCR employees, power controllers TH-P can handle currents up to 2900 A and voltages of up to 690 V, with standard models.

GENERAL

Rated voltage	P500: 230V -15%... 500 +10%, P690: 500V-15%... 690 +10%
Rated current	500 V: 16, 37, 75, 110, 130, 170, 280, 350, 495, 650, 780, 1000, 1500 (3P: 1850, 2600), (2P: 2000, 2750), (1P: 2100, 2900), 690 V: 80, 200, 300, 500, 780, 1400 (3P: 1700, 2200), (2P: 1850, 2400), (1P: 2000, 2600)A
Functioning mode	Wave trains (TAKT), shutter phase (VAR), softstart-softdown (SSSD), MOSI
Starting mode	RAMP, softstart-softdown, MOSI (high temperature coefficient)
Input	0/4...20 mA, 0/1...5 V, 0/2...10 V
Control type	V voltage, V ² voltage, I current, I ² current, P power
Control accuracy	± 0.5%
Limitations	Veff voltage, Ieff current, P power, MOSI
Diagnostics	New Thyro-Touch keypad with extended functions Status indication: 7 easy access LEDs Anomaly indication: via LED, 3 alarm relays and Thyro-Touch keypad Multizone function: 2PX as 2 1PX, 3PX as 3 1PX
Type of load	Resistance at high or low temperature coefficient (RC/RF up to 20), transformers, inductive loads
Power circuit connection	Single-phase (1P), three-phase with two controlled phases (2P), three-phase with three-phase controlled (3P)
Operating temperature	Up to 170 A: -10 ... + 45 ° C (natural ventilation), 280 A: -10 ... + 35 ° C (forced cooling)
Connectivity	RS232, module slot, USB, I/O bus Anybus modules: Modbus RTU / TCP, PROFIBUS DPV1, PROFINET, DeviceNet, EtherNet / IP, EtherCAT Optional dASM module (2 RJ-45 connectors): network load optimization for multiple wave train THPX (TAKT)
Dimensions	(W x H x D): from 150 x 320 x 232 to 593 x 1094 x 474 mm depending on the model size
Compliance	CE, UL

HOW TO ORDER

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

TH-	CODE
VERSION	
Single Phase Operating modes: TAKT, VAR, SSSD	1PX
Three-phase connection passing phase Operating Mode: TAKT, SSSD	2PX
Three-phase pure Operating modes: TAKT, VAR, SSSD	3PX
RATED VOLTAGE	
230... 500 V	500
500... 690 V	690
RATED CURRENT	
Pls. specify a value between 37 and 2600 A	----
TYPE	
Standard functions	DASM
Standard functions as H but for current ≥ 280 A	DFASM

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

OPTIONS

LOCAL DISPLAY WITH INTEGRATED KEYBOARD
2.8 "Touch Display for parameter setting Bar chart, Line chart, current (numerical) values, Data logger display Integrated SD card to load or save data PDF data export
FRONT PANEL DISPLAY INSTALLATION (SEK)
Front panel installation kit.
DIGITAL AND ANALOG I/O
Interfaces can be inserted in slots inside the controller: Digital I/O: 9 digital inputs, 3 digital outputs Digital and analog I/O: 4 digital inputs, 3 digital outputs, 3 analog inputs.
THYRO-TOOL PRO
Utility Software with Thyro-AX® and Thyro-PX SCR management, display and diagnosis functions. Individual analysis of: real value, Set points, Line charts, parameter analysis, presentation of the power controller process data.
ANYBUS INTERFACE
Anybus® interfaces for easy connection with a wide range of industrial protocols. Main buses available: EtherNet / IP®, Profibus DPV1®, PROFINET®, DeviceNet™, Modbus RTU®, Modbus TCP®, EtherCAT®.
DASM MAINS LOAD OPTIMIZATION
This function enables load optimization for the Thyro-PX series (excluding Thyros PX VSC) in TAKT operating mode.