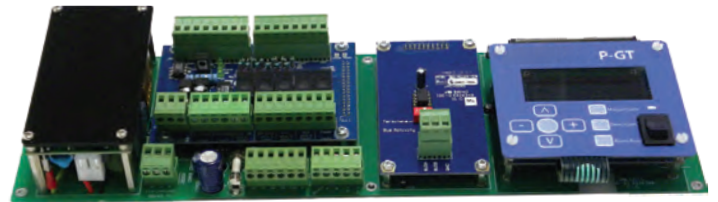# P-GT SERIES

PGT CONTROLLER

DESCRIPTION

The PGT Control System is an advanced filter-cleaning control system for large applications such as gas turbine filter intake systems.
It provides a flexible solution with an easy wiring system, all aimed at reducing the costs associated with running and maintaining a dust filtration system.

An RS-485 Modbus RTU compliant communications card provides full networking and remote programming for DCS and SCADA systems.
The system has several voltage-free contacts for alarms, 4–20 mA output, and basic remote control. The solenoid outputs can be expanded up to 4560 outputs through the use of our hubs and expansion cards.

FEATURES

• Expansion cards and hubs enable the controller to support up to 4560 unique outputs

• Low temperature operation −40°C (−40°F)

• Automatic pilot valve detection

• Voltage free coil error outputs and a visual indication on the display showing which pilot valve output has an error, enabling quick fault finding and debugging.

• Expansion cards have pushing buttons to actuate each output, enabling quick debugging and fault finding.

• Stainless Steel enclosure product comes standard with tube cleaning functionality

• Conforms to the requirements of CE, FCC, RCM, UL (non-enclosure products).

TECHNICAL CHARACTERISTICS & PERFORMANCE

dP Support	0–2.5 kPa
Input Voltage	AC: 80-264 V @ 50/60 Hz
Output Voltage	DC: 24 V
Maximum Input Power	110 W
Discrete Solenoid Outputs	0 outputs onboard 19, 10 or 12 output expansion cards can be used without the communication hub Expandable up to 4560 outputs via the 10 & 12 output expansion cards & communications hub
Enclosure	Stainless Steel or no enclosure
Protection Rating	NEMA 4X, IP66
Operating Temperature	PGT PCB: −40°C to +70°C (−40°F to +158°F) Pilot Enclosure with Expansion Card: −40°C to +70°C (−40°F to +158°F) PGT Inside Stainless Steel Enclosure: −30°C to +60°C (−22°F to +140°F)
ON & OFF Time	ON: 30ms to 500ms, OFF: 1s to 999s
Inputs	Voltage Free: Fan Stop, Demand/Continuous, Manual Cycle, Low Header, Reset Alarm
Outputs	Voltage Free: Cycling, Watchdog, High dP Alarm, Service Alarm, Coil Alarm, AUX Alarm, Power Analogue Output: 4–20 mA dP signal

P-GT ORDERING CODES

Controller
PGT-ACDC-X

> **DIN Mounted**
> K=DIN mounted
> Blank=No mounting

Expansion Card
PSCX-DCDCXX-X-X

Outputs
10=10 output Expansion Card

DIN Mounted
Blank-Blank=No Mounting
1-E=1 Expansion Card DIN Mounted
2-E=2 Expansion Cards Din Mounted
3-E=3 Expansion Cards Din Mounted
3-E=4 Expansion Cards Din Mounted
5-E=5 Expansion Cards Din Mounted
6-E=6 Expansion Cards Din Mounted

Communications Hub
HUB

Controller in Enclosure
PGT-ACDC XX-T-SS

> **Outputs**
> 10=10 outputs
> 20=20 outputs
> 30=30 outputs
> 40=40 outputs
> 50=50 outputs
> 60=60 outputs
> 70=70 outputs

PGT bare PCB products and pilot enclosure products have the following approvals:

CE RCM (Australia)

UL Recognised Component, Engine Generators, for Canada and the US. AU6341.

PGT assembly inside the stainless steel enclosures has the following approvals:

CE RCM (Australia)

PCB BOARD DIMENSIONS

PGT-ACDC

PSCX-DCDC10

HUB

ENCLOSURE DIMENSIONS

Stainless Steel

DIMENSIONS IN MILLIMETERS [INCHES]

PSCX EXPANSION CARD INSIDE 3-12 V PILOT ENCLOSURE

Pilot Enclosure Dimensions

Internal Wiring

ORDERING CODES

3-12V XXX XX X X X

- Pilot Size & Enclosure Type
- Card Type
- Number of Active Pilots
- Pilot Valve Seal Material
- Nameplate Type Number
- Thread Type Number

SEAL MATERIAL

Material	Nitrile	Viton
Code	0	1

NAMEPLATE

Nameplate Type	No Nameplate	Goyen
Code	0	1

NUMBER OF ACTIVE PILOTS

Code	06	07	08	09	10

THREAD TYPE

Conduit Thread	NPT	M	M	M	G	G
Pilot Thread	NPT	RP	RC	NPT	RP	RC
Code	0	1	N/A	3	4	N/A

CARD TYPE

Card type	10 Way Expansion	Communication Hub
Card P/N	PSCX-DCDC10	HUB
Code	CXA	CXH