

MetaCenter P4

Sullivan-Palatek®

Identification:	MetaCenter P4
Part number:	Refer to Product guide / price list for specific part number or contact dealer
Product Family:	MetaCenter
Function:	Central management control & monitoring of air / gas compressors Optional integrated control / monitoring of ancillary compressed air equipment
Definition:	Narrow pressure band controller with enhanced software features & functions
Capacity:	2, 3 or 4 air / gas compressors & MetaCenter ancillary product control / monitoring via optional MetaCenter I/O & sensor options
Compressor connectivity:	P4 Terminal board & dedicated compressor interface or via AirBUS communication protocol
Supported protocol:	AirBUS & Modbus RTU via dedicated network gateway
Software:	Pre-programmed application software, configurable via password protected operator interface

Product overview:

As demand for compressed air fluctuates and as system pressure decays or increases in response to that demand, MetaCenter compressor management systems ensure that site wide compressors and ancillary compressed air equipment are harnessed as 1 to obtain an equilibrium where efficiency, equipment utilisation and system pressure are in perfect balance. In unmanaged compressed air systems that equilibrium represents a significant energy & cost saving opportunity.

MetaCenter P4 is a specialised supervisory control product designed to provide energy efficient optimised narrow pressure and priority management control of up to 4 air / gas compressors operating in a common compressed air / gas system.

MetaCenter P4's general operating mode can be modified via a number of adjustable parameters enabling its control strategy to align with / optimise available compressed air equipment and site specific installation characteristics.

Features & Functions:

The primary function of the MetaCenter P4 pressure control strategy is to maintain system pressure between the 'High Pressure' set point & the 'Low Pressure' set point in conjunction with targeting energy efficiency through optimal compressor utilisation. The P4 calculates a 'Target' pressure level which is used as the nominal 'target' pressure level for the system. Rate of change in pressure, is largely determined by system volume and the scale, and/or abruptness, of air demand fluctuations; these characteristics will differ from installation to installation. To accommodate for variations in installation characteristics the 'Tolerance' pressure level (TO) and an influence on the dynamic reaction time (or 'Damping') of the P4 is adjustable.

Key product features:



One touch & single pressure band technology narrowing site wide pressure to a minimum of 2.9psi (0.2bar)



Table Technology that allows configuration and inter-utilisation of up to 3 separate compressor management & control strategies



Real time clock & pressure schedule adding necessary fine tuning and pressure optimisation capabilities



Remote I/O expansion. Add distributed intelligence to monitor equipment, sensors and automate functions

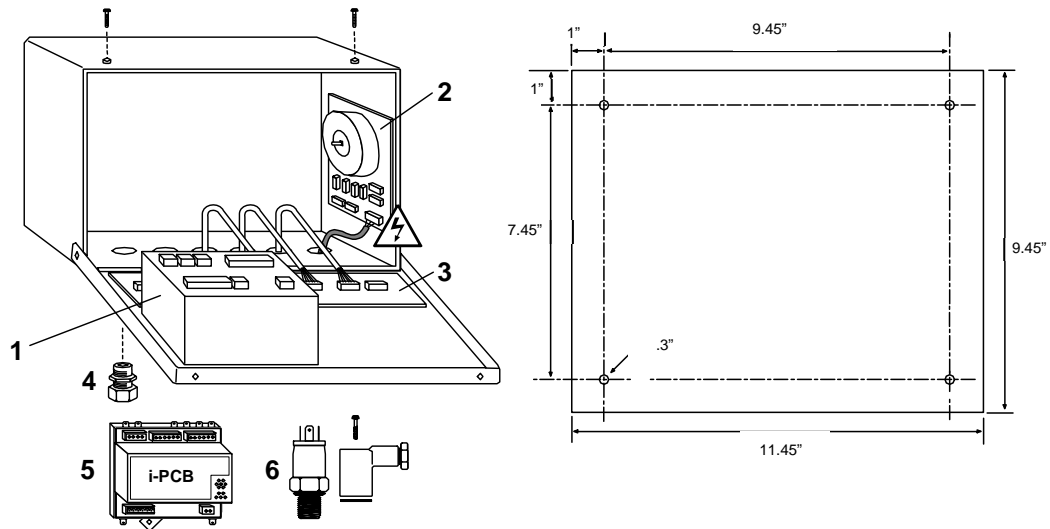


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Pressure ref: 4 – 20mA
 Pressure scale: Configurable to 957 PSI (600bar)
 Processor: 16bit ST10 Micro-processor
 Op. interface: 128 x 64 graphical back lit LCD
 Real time clock: internal real time clock
 Software: Pre-programmed application software, configurable via password protected operator interface

Protocol: **Airbus**™ RS485 & Modbus RTU via dedicated network gateway
 Modes of control: Fixed cascade, ☑ Equal hours run, ☑ First in first out, ☑ Timer rotation (FILO)
 Tables: 3 operating parameter tables
 Software features: ☑ Pre-fill, ☑ Sequence rotation, ☑ Priority settings, ☑ Pressure schedule
 Auxiliary output: 1 x Menu selectable single function relay output ² (² see function list below)
 Auxiliary input: 1 x Menu selectable single function digital input ¹ (¹ see function list below)
 Supply / Power: 230Vac +/- 10%, 115Vac +/- 10%, 50VA
 Enclosure rating: IP54 / NEMA12
 Dimensions: Height: 9.45" (241mm) x Width: 11.45" (291mm) x Depth: 6" (152mm)
 Access: Front, lockable, hinged access panel
 Cable entry: Bottom, gland cable entry system
 Weight: 14lb(6.4kg)
 Mounting: Wall, 4 x screw fixing
 Temperature: Min 32°F (0°C), Max +115°F (46°C)
 Humidity: 95% RH non-condensing
 Approvals: CE, UL, cUL



Item - description
 1 Unit, Controller
 2 Unit, XPM-TAC24
 3 PCB, Terminal
 4 Gland, Set – PG 13.5
 5 Module, iPCB*
 6 Sensor, pressure*
 * Supplied as part of P4 kit only

¹ Auxiliary digital input – Function list:
 Override - table 1
 Override - table 2
 Override - table 3
 Override – standby
 Remote start / stop
 Remote alarm (always active)
 Remote alarm
 (active when MetaCenter running only)
 Remote trip (always active)
 Remote trip
 (active when MetaCenter running only)

² Auxiliary relay output – Function list:
 Any fault (Alarm, Trip, unavailable condition)
 Any trip (trip, unavailable condition)
 Compressor fault (Alarm, Trip, unavailable)
 Compressor alarm (Alarm)
 Compressor trip (Trip, unavailable)
 System fault
 System On
 System active
 System pressure control active
 Low pressure alarm
 High pressure alarm
 Pressure control override

