



## Inverter system type PCI05

### 0,5kVA to 4kVA - 230V<sub>AC</sub>

*Inverter system type PCI05 for interconnection with DC system wherever uninterruptible power supply is needed, e.g. for computers and process control.*

#### **Robust design**

Designed for industrial environments where the requirements for security and availability are high.

#### **Uninterruptible switching**

Switching automatically and uninterruptible to alternative AC network.

#### **Safe maintenance**

Easy to bypass through the manual bypass switch for uninterrupted isolation during maintenance and service.

#### **Safe operation and high availability**

We help you with commissioning and service and provide training in the operation and maintenance.

#### **System monitoring**

Built-in controller that regulate and supervise the system and activate the bypass device that connects the load to the alternate network in case of failure.

#### **Complete documentation**

Makes design and maintenance efficient and can be delivered in electronic format.

# Inverter system type PCI05

## General

Inverter system PCI05 is an inverter system that consists by a controller that controls and monitors the system, a bypass unit that connects the load to the alternative mains supply in case of failure and one or more inverter modules. The system is built in modules of function devices that are already connected to a system with direct connection to the terminals.

## Inverter module

Output power: 0,5kVA-4kVA  
Control principle: Sinusoidal, processor controlled  
Output stage: IGBT, low impedance

## Manual bypass

Type: Contactor  
Switch time: <20ms

## Electrical connections

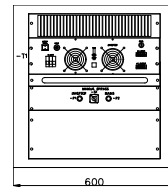
DC IN: screw terminal, see table 1  
AC OUT: screw terminal, see table 1  
AC IN (bypass): screw terminal, see table 1  
Alarm: Disconnect terminal blocks, 4 mm<sup>2</sup>

## Output AC

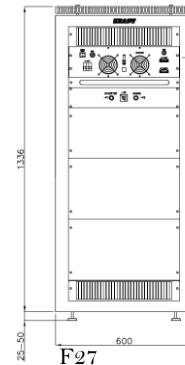
Output voltage: 230VAC ±5%  
Frequency: 50/60 Hz  
Power factor: 0,8  
Crest factor: >2,5  
Overload protection: >125% 12 sec., >150% 3 sec.  
Efficiency: approx. 88%  
Other: See table 1

## Environment

Ambient temperature: Operation, -5 to +40 °C  
Storage, -40 to +70 °C  
Humidity: < 90 % RH, non-condensed  
Altitude, a.s.l.: < 2000 m



FW12



F27

## Indications

LCD display: Plain text display for status, control and alarm,  
LED indicator for output power  
Extern alarm signal: Potential free switching contact  
Remote communication: Standard RS232 data interface

## Enclosure

Floor cabinet: F27 with 19" fixed frame work  
Wall cabinet: FW12 with 19" fixed frame work  
Cable entrance: Above or - below  
Size F41 (h/b/d): 2000 mm/600 mm/400 mm  
Size F27 (h/b/d): 1361 mm/600 mm/600 mm  
Size W12 (h/b/d): 604 mm/600 mm/500 mm  
Color: RAL 7035 light grey  
Class of enclosure: IP21  
Ventilation: Power controlled fans in the inverter modules

## Standards

Safety: EN 60950, VDE 0805  
Galvanic isolation: 3.75 kV DC  
EMC (emission): SS-EN 61000-6-3/4  
EMC (immunity): SS-EN 61000-6-2  
Class of enclosure IP21: EN 60529

## Option

Input voltage: 115V<sub>AC</sub>  
AC-distribution: Distributions module AC with 9 pce. MCB per module

Input voltage V <sub>DC</sub>		Output Power VA	Output Power W	Maximum Output current A <sub>AC</sub> @ 230V <sub>AC</sub>	Maximum Input current A <sub>DC</sub>	Terminal block capacity mm <sup>2</sup>	
nominal	min – max					DC in	AC in/out
24	19-31	500	400	2.1	24	3x16mm <sup>2</sup>	IEC 320
		1000	800	4.3	48	3x16mm <sup>2</sup>	IEC 320
		2000	1600	8.7	96	3x16mm <sup>2</sup>	IEC 320
48/60	38-72	500	400	2.1	12	3x16mm <sup>2</sup>	IEC 320
		1000	800	4.3	24	3x16mm <sup>2</sup>	IEC 320
		2000	1600	8.7	48	3x16mm <sup>2</sup>	IEC 320
		4000	3200	17.4	96	3x16mm <sup>2</sup>	1*
110	88-132	500	400	2.1	5.3	3x16mm <sup>2</sup>	IEC 320
		1000	800	4.3	11	3x16mm <sup>2</sup>	IEC 320
		2000	1600	8.7	21	1*	IEC 320
		4000	3200	17.4	42	3x16mm <sup>2</sup>	1*
125	88-149	500	400	2.1	5.3	3x16mm <sup>2</sup>	IEC 320
		1000	800	4.3	11	3x16mm <sup>2</sup>	IEC 320
		2000	1600	8.7	21	1*	IEC 320
220	178-264	500	400	2.1	2.6	3x16mm <sup>2</sup>	IEC 320
		1000	800	4.3	5.1	3x16mm <sup>2</sup>	IEC 320
		2000	1600	8.7	11	1*	IEC 320
		4000	3200	17.4	21	3x16mm <sup>2</sup>	1*

Table 1, System Ratings. (1\* Phoenix Power CombiCon, 4 mm<sup>2</sup>)



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