

INDUSTRIAL AUTOMATION PRODUCT

8C-PCNT03

Series 8 C300 Controller

Configured control execution, Series 8 I/O data and FTE controller communication

IDENTITY	VERIFIED VALUE
Manufacturer	Honeywell
System family	Experion PKS C300
Part number	8C-PCNT03
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



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Technical Specifications

Technical values below are limited to the named Honeywell product record.

PARAMETER	TECHNICAL VALUE
Controller model	8C-PCNT03; coated
Program memory	16 MB
Processor	Single core
Supported Experion releases	R110, R120, R500, R51x, R520
Execution units	5500
Tagged objects	4095
Memory units	16384
Control execution period	50 to 60000 ms
CPU reserved capacity	20%
I/O links	2
I/O link rate	750 kbit/s
I/O units per controller	80
I/O units per link	40
Maximum I/O	2560
FTE interfaces	Dual 100 Mbit/s
Redundancy	IOTA based; bumpless switchover
RAM retention	Optional; 50 h
Coating	G3; ANSI/ISA S71.04-1985

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System Role and Architecture

Configured control execution, Series 8 I/O data and FTE controller communication

FUNCTION 1

Executes configured Control Builder strategies

FUNCTION 2

Connects as many as eighty I/O units over two I/O links

FUNCTION 3

Provides dual one-hundred-megabit FTE interfaces

FUNCTION 4

Supports IOTA-based redundant controller operation

Matched system components

- 8C-TCNTA1 controller IOTA
- Series 8 I/O modules
- FTE network
- Experion server and Control Builder project

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	8C-TCNTA1 controller IOTA
Companion hardware	Series 8 I/O modules
Field connection	FTE network
Primary system function	Executes configured Control Builder strategies
Controlled acceptance duty	Continuous-process control

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Applications and Engineering Context

Continuous-process control

Executes configured Control Builder strategies

Redundant C300 controller service

Connects as many as eighty I/O units over two I/O links

Series 8 I/O coordination

Provides dual one-hundred-megabit FTE interfaces

Experion control-node modernization

Supports IOTA-based redundant controller operation

TECHNICAL NOTE

Back up the approved Control Builder project, verify the 8C-TCNTA1 IOTA and supported Experion release, then prove FTE, I/O links and redundancy before production release.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	8C-PCNT03 / 8C-PCNT03 recorded
Physical interface	8C-TCNTA1 controller IOTA
Companion check	Series 8 I/O modules
Functional proof	Executes configured Control Builder strategies
Application test	Continuous-process control

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Engineering Precautions

- 1
- Verify the complete 8C-PCNT03 marking and its assigned C300 controller position before work.
- 2
- Place the connected process and control strategy in the approved maintenance state.
- 3
- Isolate the applicable cabinet supply and I/O-link and FTE field energy before disconnecting conductors.
- 4
- Record terminal numbers, channel assignments, polarity, shields and configured ranges before removal.
- 5
- Use ESD controls and protect the backplane connector, terminal hardware and coated electronics.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
SC-UCMX02	Related industrial automation product	View SC-UCMX02 page
FTA-T-01	Related industrial automation product	View FTA-T-01 page
FC-QPP-0002	Related industrial automation product	View FC-QPP-0002 page
FC-PSUNI2424-SPS6061-LF	Related industrial automation product	View FC-PSUNI2424-SPS6061-LF page
FC-TPSU-2430	Related industrial automation product	View FC-TPSU-2430 page
MU-KFTA05-51201420-005	Related industrial automation product	View MU-KFTA05-51201420-005 page
FC-TSRO-0824-V1-1	Related industrial automation product	View FC-TSRO-0824-V1-1 page
900CP1-0300	Related industrial automation product	View 900CP1-0300 page

MANUFACTURER SOURCE RECORD

Honeywell Series 8 Controller and I/O Specification
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