

CON041

PR642x eddy-current sensor signal converter

CONTROLLED ENGINEERING COPY

Match the converter setup to the exact PR6422/3/4/6 probe, isolate cabinet power, preserve terminal identity and confirm gap voltage plus full-range response after DIN-rail installation.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	CON041
Manufacturer part	CON041
Hardware type	CON041
System family	PR642x DIN-rail eddy-current transducer system



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01 PRE-INSTALLATION PLAN

- 1

Confirm the complete CON041/SNG-CON041/SNG-CON041-SF identity and paired probe family before replacement.
- 2

Place the monitored machine and protection channel in the approved maintenance state.
- 3

Isolate cabinet power and record every supply, signal and shield terminal.
- 4

Release the DIN-rail latch without bending terminals or stressing adjacent converters.
- 5

Use ESD controls and keep the sensor connector plus terminal area clean and dry.

MATCHED HARDWARE

- PR6422, PR6423, PR6424 or PR6426 probe
- DIN-rail cabinet position
- Negative DC supply and signal wiring
- Compatible Emerson or third-party voltage input

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	CON041 / CON041 recorded
Physical interface	PR6422, PR6423, PR6424 or PR6426 probe
Companion check	DIN-rail cabinet position
Functional proof	Mounts on a control-cabinet DIN rail
Application test	Compact radial-vibration channels

02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Converter model	CON041
Alternative models	SNG-CON041; SNG-CON041-SF
Mounting	DIN rail
Compatible sensors	PR6422; PR6423; PR6424; PR6426
Standard PR6422 range	1 mm; linearity <=1.5%
Standard PR6423 range	2 mm; linearity <=1.0%
Standard PR6424 range	4 mm; linearity <=1.5%
Standard PR6426 range	8 mm; linearity <=1.5%
Voltage output	-4 to -20 V DC
Installation environment	Control cabinet

FIELD NOTE

Match the converter setup to the exact PR6422/3/4/6 probe, isolate cabinet power, preserve terminal identity and confirm gap voltage plus full-range response after DIN-rail installation.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	CON041 / CON041 recorded
Physical interface	PR6422, PR6423, PR6424 or PR6426 probe
Companion check	DIN-rail cabinet position
Functional proof	Mounts on a control-cabinet DIN rail
Application test	Compact radial-vibration channels

04 RETURN-TO-SERVICE RECORD

- ☐ Restore the probe-family range and verify it matches PR6422, PR6423, PR6424 or PR6426.
- ☐ Set the probe static gap within the correct family linear region and record the quiescent output.
- ☐ Prove polarity, full-range response and alarm action before returning the channel to service.
- ☐ Confirm the intended process response before normal operation.

VERIFICATION RECORD

PRODUCT IDENTITY	CON041
INSTALLED POSITION	Documented PR642x DIN-rail eddy-current transducer system position
VERIFICATION METHOD	Controlled inspection and functional test
RELEASE RECORD	Final diagnostic state retained before service

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
12P4705X062	Related Emerson product	View 12P4705X062 page
EZ1000	Related Emerson product	View EZ1000 page
KJ3222X1-BA1-12P2532X112 ...	Related Emerson product	View KJ3222X1-BA1-12P2532X112... page
KJ3221X1-BA1-12P2531X122 ...	Related Emerson product	View KJ3221X1-BA1-12P2531X122... page
775XD11NAWA3WK9	Related Emerson product	View 775XD11NAWA3WK9 page
098-01257-01	Related Emerson product	View 098-01257-01 page
5X00167G01	Related Emerson product	View 5X00167G01 page
PR6423-010-040-CON021	Related Emerson product	View PR6423-010-040-CON021 page

SOURCE IDENTIFIERS

Emerson CON041 Converter for PR642x Eddy Current Sensors Installation Guide
MHM-97860 Rev. 10.1, January 2025

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