

# Overload Relay Communication Modules

Seamless development of motor starters on Ethernet or Profibus based communications architectures can now be cost effective with the CEP7(S)-EE... electronic overload relay and optional field installable communications modules with minimal space requirements (22mm). Streamline your processes with better control, protection, monitoring, and diagnostic capabilities for improved efficiency. Select a communication module to deliver direct access to motor performance and diagnostic data on either a Ethernet/IP network or Profibus field bus based network.

## CEP7-ETN Ethernet Network Communication Module

- Connects to the network via RJ45 (Cat 5) connector.
- Supports I/O and explicit messaging for data access by programmable automatic controller.
- Contains predefined ControlLogix style tags for direct software access.
- Includes an integrated web server to allow users to read information and configure parameters via a computer web browser from remote locations.
- Uses a Simple Mail Transfer Protocol (SMTP) server to send e-mail or text messages in the event of a warning or trip condition.



## CEP7-EPRB Profibus Network Communication Module

- Supports both PROFIBUS DP-V0 and DP-V1.
- Connects to the network via 910D shell connector.
- This is a Profibus Slave Device which requires a Profibus Master installed in the control system.



## Advantages

- **Compact size**
  - Direct mounting to the left side of the current sensing CEP7 -EE Overload Relay only adds 22mm to the width
- **Simplifies control**
  - Side-mount modules electronically interface with the CEP7 Overload Relay so that all control circuit connections are made at the Overload Relay terminals.
- **Includes integrated I/O**
  - 2 inputs
  - 1 output
- **Provides operational and diagnostic data**
  - Average motor current
  - Percentage of thermal capacity usage
  - Device status
  - Trip and warning identification
  - Trip history (five previous trips)
- **Expands protective functions**
  - Overload warning
    - 1...100% TCU
  - Jam protection
    - Trip setting 150...600% FLA
    - Trip delay 0.5...25 seconds
    - Warning setting 100...600% FLA
  - Underload warning
    - 20...100% FLA

# Network Communication Modules



**CEP7-ETN**  
Ethernet Network  
Communications Module

## ETHERNET/IP COMMUNICATIONS

TCP Connection	150
CIP Connection	48
CIP Unconnected Messages	128
I/O Packet Rates	500/s
Explicit Packet Rates	500/s
Speed Duplex (Half/Full)	10/100
Duplicate IP Detection	Yes

## ELECTRICAL

<b>Power Supply Ratings</b>	
Rated Supply Voltage	24V DC
Rated Operation Range	20.4...26.4V DC
Rated Supply Current	0.1A
Maximum Surge Current at Power-up	2.5 A
Maximum Power Consumption	2.5...2.7 W
<b>Output Relay Ratings</b>	
Terminal OUT A	13/14
Type of Contacts	Form A SPST-NO
Rated Thermal Current	5 A
Rated Insulation Voltage	300V AC
Rated Operating Voltage	240V AC
Rated Operating Current	3 A (@ 120V AC) 1.5 A (@ 240V AC) 0.25 A (@ 110V DC) 0.1 A (@ 220V DC)
Minimum Operating Current	10 mA (@ 5V DC)
Rating Designation	B300
Utilization Category	AC-15
Resistive Load Rating (p.f. 1.0)	5 A, 250V DC 5 A, 30V DC
Inductive Load Rating (p.f. = 0.4), (L/R = 7 ms)	2 A, 250V AC 2 A, 30V DC
Short Circuit Current Rating	1000 A
Recommended Control Circuit Fuse	KTK-R-6 (6 A, 600V)



**CEP7-EPRB**  
Profibus Network  
Communications Module

## PROFIBUS COMMUNICATIONS

Baud Rate	9.6 k, 19.2 k, 45.45 k, 93.75 k, 187.5 k, 500 k, 1.5 M, 3 M, 6 M, 12 M
Auto-Baud Rate Identification	Yes
DP-V0 (Cyclic data exchange)	Yes
DP-V1 (Acyclic services)	Yes
DP-V2 (Acyclic services)	No
Set Slave Address (SSA) support	Yes

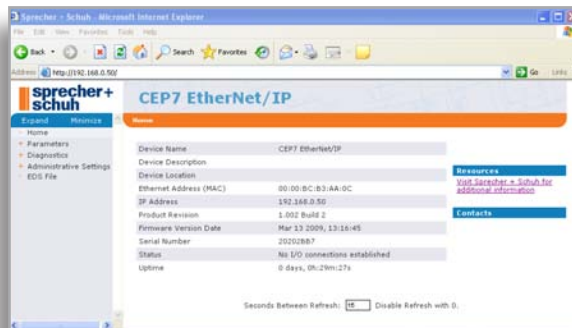
## Input Ratings

Terminal IN1	1
Terminal IN2	2
Terminal SSV (Sensor Supply Voltage)	3
Supply Voltage (Supplied by Module)	20.4...26.4V DC
Type of inputs	Current Sensing (Dry Contacts)
<b>Jam Protection</b>	
Trip Level	150...600% FLA
Trip Delay	0.1...25 s
Inhibit	0.0...250 s
<b>Standards</b>	
UL 508	
CSA 22.2, No. 14	
EN 60947-4-1	

## MECHANICAL

### Environmental Ratings

Storage Ambient Temperature	-40...+ 85°C (-40...+ 185°F)
Operating Ambient Temperature	
(Open) Ambient Temperature	-20...+ 60°C (-4...+ 140°F)
(Enclosed) Ambient Temperature	-20...+ 40°C(-4...+ 104°F)
Operating Humidity	5...95% Non-Condensing
Damp Heat - Steady-State Humidity	Per IEC 68-2-3
Damp Heat - Cyclic Humidity	Per IEC 68-2-30
Maximum Altitude	2000 m
Degree of Protection	IP 20



## CEP7-ETN Offers Integrated Web and E-mail server

View the status and events of your overload relay on the web at anytime, anywhere!

- The CEP7-ETN contains a web server to allow users to read information and configure parameters via the web.
- Uses a simple mail transfer protocol (SMTP) server to send e-mail or text messages in the event of a warning or trip condition.

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