JOHNSON CONTROLS

Controls Group 507 E. Michigan Street
P.O. Box 423, Milwaukee, WI 53202
Code No. LIT-1928015

Network Control Units / Network Expansion Units

Description

The Network Control Unit (NCU) is a high-performance field panel designed to provide heating, ventilating, and air conditioning applications for any size of facility. For small facilities, the NCU serves as the main control panel in charge of running and supervising all control applications. For medium to large facilities, several NCUs are often used, where each NCU controls a portion of the facility. Multiple NCUs located throughout the facility are connected via a local area network to share their information. Unlike other systems, this sharing is unlimited and allows any NCU access to information at another NCU or any other controller on the network.

The NCU also coordinates a local network of Application Specific Controllers (ASCs) as they perform HVAC, lighting, fire, and access control functions. In this application, the NCU provides alarm monitoring and integrated control functions for the standalone controllers.

Another Metasys product, the Network Expansion Unit (NEU), allows for the expansion of I/O points and control loops. The NEU is located remotely from and communications with the NCU.

The operator communicates to the NCUs, NEUs, and lower-level controllers with any three of the available operator devices: Operator Workstation, Operator Terminal, or Network Terminal. Communication can occur over the network, over a local connection, or over phone lines using a modem.

Features

- modular design accommodates a family of modules for economical installation, service, and future expansion
- molded, hardened packaging meets the structural and safety standards set by metal, but vastly reduces labor costs
- pneumatic, electric, and electronic gear housed in a single panel, which saves on installation costs and increases system reliability
- operator can communicate with control unit either locally or remotely, whichever is more convenient at the time
- NCUs and NEUs are part of a distributed, high-speed network, dispensing with a single point of failure

To Order

Contact your local Johnson Control Representative.

Specifications

Network Control Unit / Network Expansion Unit		
Power Requirements		85-264 VAC at 50/60 Hz
Ambient Operating Conditions		32 to 122°F (0 to 50°C) 10 to 90% RH
Ambient Storage Conditions		-40 to 158°F (-40 to 70°C) 5 to 95% RH
Dimensions (H x W x D)	**EN-EWC100-0:**	10 in. x 28 in. Enclosure-With-Cover 10 in. x 28 in. x 8.5 in. (26 x 72 x 22 cm) (Fits 1-slot Base Frame)
	EN-EWC200-0:	16 in. x 38 in. Enclosure-With-Cover 16 in. x 38 in. x 8.5 in. (41 x 97 x 22 cm) (Fits 1-slot or 2-slot Base Frame; auxiliary gear with both configurations)
	EN-EWC500-0:	26 in. x 48 in. Enclosure-With-Cover 26 in. x 48 in. x 8.5 in. (67 x 118 x 22 cm) (Fits 1-slot, pair of 1-slots, 2-slot, or 5-slot Base Frame(s); auxiliary gear with all configurations)
	EN-EWC22-0:	16 in. x 16 in. Enclosure-With-Cover 16 in. x 16 in. x 7.5 in. (41 x 41 x 19 cm) (Fits NCM300 series only)
Agency Compliance		FCC Part 15 Class A; UL 916; CSA C22.2 No. 205
Agency Listing		UL Listed and CSA Certified as part of the Metasys Network

Network Control Units / Network Expansion Units (Continued)

Selection Chart

Code Number	Description	Shipping Weight lb (kg)
	Base Frames	
EN-BSF201-0	2-slot Base Frame	--
EN-BSF501-0	5-slot Base Frame	--
	NCU/NEU Enclosures with Covers	
EN-EWC100-0	10 in. x 28 in. Enclosure with Matching Cover	22 (9.98)
EN-EWC200-0	16 in. x 38 in. Enclosure with Matching Cover	33 (14.97)
EN-EWC500-0	26 in. x 46 in. Enclosure with Matching Cover	52 (23.59)
	Enclosure Accessory	
EN-KIT103-0	Network Terminal Cradle Kit	3 (1.36)
	Keys	
EN-KEY101-0	Master Keys (bag of 5)	0.2 (0.09)
EN-KEY102-0	Tenant Keys (bag of 5)	0.2 (0.09)
	Major Modules for NCU/NEU	
NU-DCM140-0	Digital Control Module	2.6 (1.18)
NU-XBN101-0	Point Multiplex Module, XBN, 32 Binary Inputs	2 lbs 11 oz (1.23)
NU-XRL101-0	Point Multiplex Module, XRL, 8 Binary Inputs/8 Magnetically Latched Outputs	2 lbs 11 oz (1.23)
NU-XRE101-0	Point Multiplex Module, XRE, 8 Binary Inputs/8 Electrically Maintained Outputs	2 lbs 11 oz (1.23)
NU-PWR101-0	Power Supply Module	0.5 (0.23)
NU-LAI101-0	Identification Inserts, Door	0.5 (0.23)
	Preload Resistors	
EN-PLR101-0	Preload Resistors for 1-Slot Base Frame	--
EN-PLR201-0	Preload Resistors for 2-Slot Base Frame	--
EN-PLR501-0	Preload Resistors for 5-Slot Base Frame	--
	Network Terminal	
IO-NTU102-0	Network Terminal Unit	--

Repair Parts

Code Number	Item
	Covers
EN-CVC101-700	1-Slot Clear Cover
EN-CVC201-700	2-Slot Clear Cover
EN-CVC501-700	5-Slot Clear Cover
EN-CVC502-700	5-Slot Clear Cover
	Field Terminal Blocks
EN-TBF101-0	In/Out Terminals (left)
EN-TBF201-0	In/Out Terminals (bottom - left)
EN-TBF301-0	In/Out Terminals (right)
	Power Assembly
EN-TBP102-0	1-Slot Power Assembly
EN-TBP202-0	2-Slot Power Assembly
EN-TBP502-0	5-Slot Power Assembly
	Communications
EN-TBC801-0	Communications Terminal Board used with NCM101
EN-TBC821-0	Communications Terminal Board
	Power
NU-PWR101-700	Replacement Power Supply