

MRS-CPUV01: Modular automation station with BACnet/IP and web server

How energy efficiency is improved

MIRAE ELECTRICAL MFG. CO. LTD. modulo technology: modular, fast and universal.

Areas of application

Regulation, control, monitoring and optimisation of technical installations, e.g. HVAC

Features

- Modular automation station
- Extensible by 8 I/O modules for up to 154 inputs/outputs in total
- Extensible with communication modules for integrated non-MIRAE Electrical Mfg. Co. Ltd. systems
- Part of the MIRAE ELECTRICAL MFG. CO. LTD. EY-modulo system family
- Communication: BACnet/IP (EN ISO 16484-5)
- Integrated web server
- Programming/parameterisation via PC with CASE Suite (based on IEC 61131-3)
- Control engineering libraries
- Time and calendar function
- Predictive control based on meteorological forecast data
- Data recording
- Can be equipped with local override and indication (LOI) devices, at distances of up to 10 m

Technical description

- 8 digital inputs (alarm/status)
- 8 universal inputs (Ni/Pt1000, U/I/R, DI)
- 4 analogue outputs (0...10 V)
- 6 digital outputs (relays, 24...250 V~, 2 A)
- 1 watchdog output, pulsed

Products

Type	Description
MRS-CPUV01	Modular automation station with 230 V~ BACnet/IP and web server

Technical data

Electrical supply

Power supply (F001)	230 V~, ±10%, 50...60 Hz
Power consumption	up to 13 VA/5 W (excl. accessories)
Dissipated power	up to 5 W (excl. accessories)
Power supply (F005)	24 V=, ±10%
	24 V~, ±20%, 50...60 Hz
Power consumption	up to 11 VA / 4 W (excl. accessories)
Battery (buffer: RTC/SRAM)	CR2032, plug-in

Interfaces, communication

Ethernet network	1x RJ-45 socket
10/100 BASE-T(X)	10/100 Mbit/s
Communication protocol	BACnet/IP (DIX)
Local override unit, modu840 (LOP)	1x integrated interface
Override and indication devices	
modu6.. (LOI)	1x integrated interface
Connection, I/O/COM module	1x integrated I/O bus plug for up to 8 modules (max. load: 1100 mA)
Hardware extension	up to 8 I/O modules
Integration of non-MIRAE Electrical Mfg. Co. Ltd. systems	one or two COM modules

Architecture

Processor	32 bit, 400 MHz
SDRAM (operational memory)	32 MB
SRAM (static memory)	1 MB
Flash	16 MB
Embedded web server	moduWeb
User data	via CASE Engine

Function

Function	Quantity
BACnet data point objects	512 (incl. HW)
Dynamic objects	
Time programmes	64 (Schedule)
Calendar	16 (Calendar)
Historical data	100 (Trend Log)
	up to 30,000 entries

Function (continuation)

Alerting	16 (Notification Class)
Chart (only via moduWeb)	32 (Log View)
active COV subscriptions	1500
Structured view	128 (Structured View)
Control	32 (Loop)
BACnet client links	200 (peer to peer)
BBMD in BDT	32
FD in FDT	32

Permitted ambient conditions

Operating temperature	0...45 °C
Storage and transport temperature	-25...70 °C
Humidity	10...85% rh
	no condensation

Installation

Fitting	on top-hat rail
Dimensions W x H x D (mm)	160 x 170 x 115
Weight (kg)	0.8



