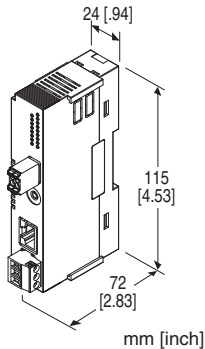


SPE Remote I/O BA8 Series

SPE CONVERTER

Functions & Features

- Equipped with SPE (10BASE-T1L) and LAN (RJ-45) ports.
- Modbus/TCP transparent.



MODEL: BA8NS-CONV-[1]

ORDERING INFORMATION

- Code number: BA8NS-CONV-[1]
- Specify a code from below for [1].
(e.g. BA8NS-CONV-M2)

[1] POWER INPUT

AC Power

M2: 100 – 240 V AC (Operational voltage range 85 – 264 V, 47 – 66 Hz)

DC Power

R: 24 V DC

(Operational voltage range 24 V $\pm$ 10 %, ripple 10 %p-p max.)

GENERAL SPECIFICATIONS

Construction: Stand-alone

Connection:

• Power

Unit side connector: MSTB2,5/3-G (Phoenix Contact)

Cable side connector: MSTB2,5/3-ST (Phoenix Contact)

Applicable wire size: 0.2 - 2.5mm², stripped length 7mm

• LAN

Modular jack for 10BASE-T / 100BASE-TX (RJ-45)

• 10BASE-T1L

Unit side connector: in-house made

Applicable connector: DFMCI,5/2-ST-3,5 (Phoenix Contact)
(included in the package)

Applicable wire size: 0.2 - 1.5mm², stripped length 10mm

Isolation: LAN to SPE to power to FE

COMMUNICATION

Number of connected client: 1

■ Ethernet

Communication standard: IEEE 802.3u

Transmission type: 10BASE-T, 100BASE-TX

Transmission speed: 10/100 Mbps

(Auto Negotiation)

Transmission media:

10BASE-T (STP cable; Category 5)

100BASE-TX (STP cable; Category 5e)

Maximum segment length: 100 meters

■ 10BASE-T1L

Communication standard: IEEE 802.3cg

Transmission speed: 10 Mbps

Transmission media: CAT5 2-wire twisted-pair

Maximum segment length: 1000 meters (standard value)

INSTALLATION

Power consumption

• AC:

Approx. 1.8 VA at 100 V

Approx. 2.3 VA at 200 V

Approx. 3 VA at 264 V

• DC: Approx. 0.8 W

Operating temperature: -10 to +55°C (14 to 131°F)

Operating humidity: 10 to 90 %RH (non-condensing)

Ambience: No corrosive gas or heavy dust; no strong electric/magnetic field; no direct effect of vibration or physical impact

Mounting: DIN rail

Weight: 100 g (0.22 lb)

PERFORMANCE

Insulation resistance: $\geq$ 100 M Ω with 500 V DC

Dielectric strength: 1500 V AC @1 minute

(LAN or SPE to power to FE)

500 V AC @ 1 minute (LAN to SPE)

REFERENCE DATA

The data shown below are of individual test pieces and do not guarantee all values.

• 10BASE-T1L transmission distance test

Used cable 1

Category 6 twisted pair cable from ELECOM

LD-CT6

Transmission distance: 970 m

Communication establishment time: Approx. 7 sec.

Used cable 2

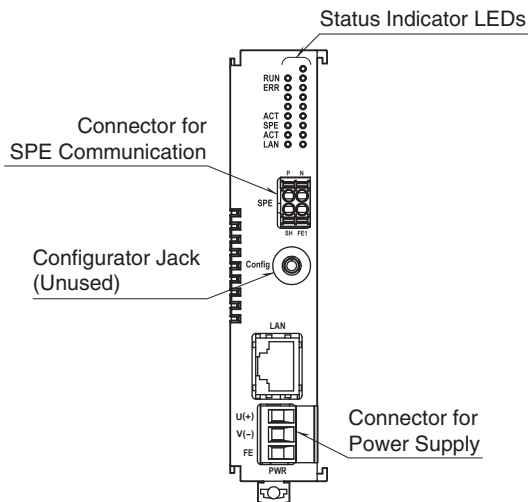
Electric button telephone cable from TSUKO DKT-Q0.5-2P

Transmission distance: 600 m

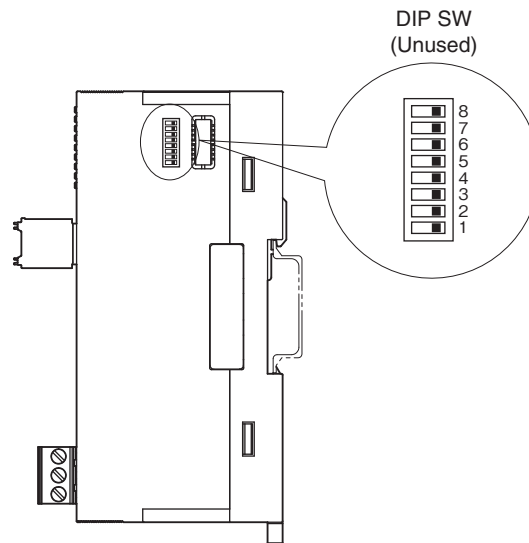
Communication establishment time: Approx. 0.5 sec.

EXTERNAL VIEW

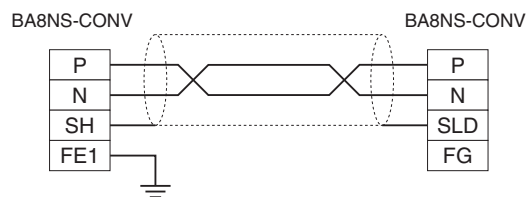
■ FRONT VIEW



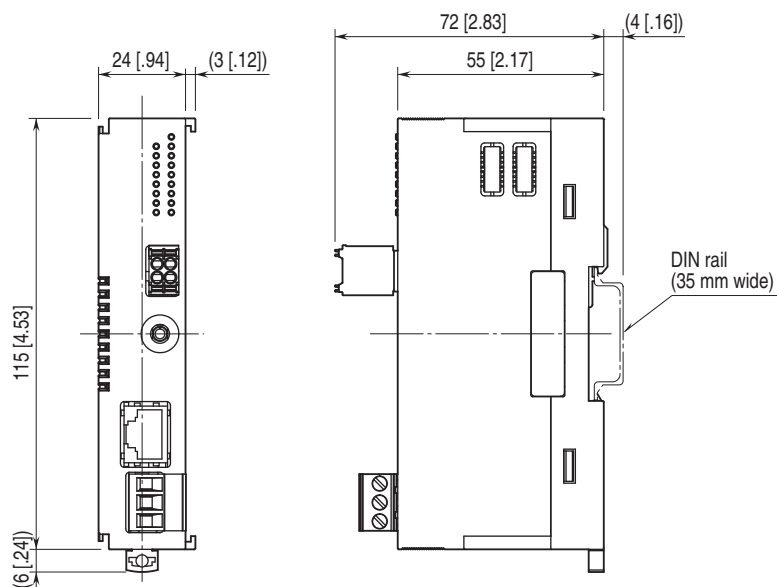
■ SIDE VIEW



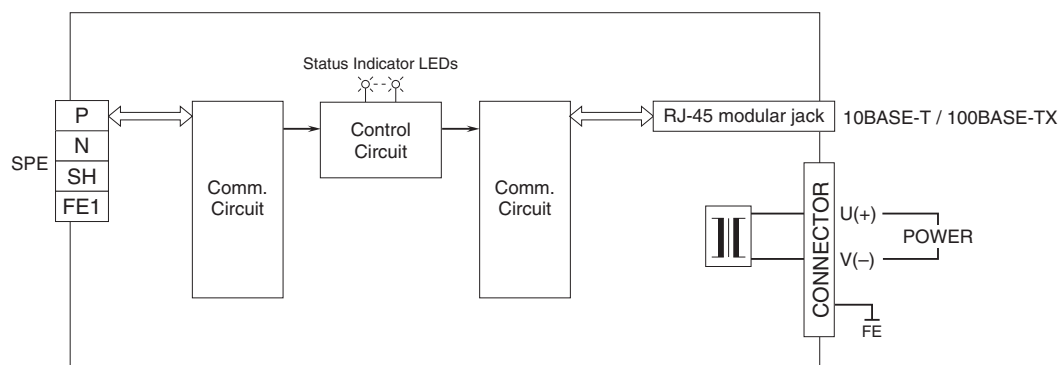
COMMUNICATION CABLE WIRING



EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.