

Voice and Signaling Converter**FEATURES**

- Converts PABX extension (FXO) to E&M interface
- 4-wire or 2-wire E&M interface
- Compatible with EIA RS-464 Types I and II, British Telecom SSDC5, and most E&M signaling standards
- Suitable for dial and touch-tone (DTMF) telephones
- Stand-alone unit (VSC-X) or rack-mount card (VSC-X/R)

**DESCRIPTION**

■ The VSC-X (Extension Interface Converter) is a voice and signaling converter, enabling connection of voice equipment to communications equipment operating with 2-wire/4-wire E&M interface. The VSC-X provides FXO loop start interfacing to the E&M interface.

■ The VSC-X interfaces between a PABX extension or a telephone line from the public exchange, and the 2-wire/4-wire E&M interface. The unit enables remote extension from the PABX through digital multiplexers and a remote VSC unit. (For VSC unit see data sheet.)

■ The VSC-X recognizes the ring signal (20 Hz, high voltage), translates it into the proper signaling standard, and sends the resulting signal over the "M" lead. When detecting activity on the "E" lead, the VSC-X activates both the off hook simulation (by activating the loop towards the PABX or exchange), and the "M" lead. Different "M" and "E" signaling types are strap-selectable to match virtually any PABX interface.

■ The voice interface on the E&M side is switch-selectable for either 2-wire or 4-wire operation. The voice, to and from the telephone/extension is attenuated by 3 dB nominally when 4-wire is selected.

■ The VSC-X is available as either a desk-top unit or as a card for insertion in the VSC-MN 19" card-cage. The card-cage can carry up to 14 VSC-X/R cards. The VSC-X/R cards can be mixed with the VSC-R (FXS) cards.

SPECIFICATIONS

M Signaling Types

British Telecom SSSDC5
EIA RS-464/FCC Part 68:
Types I and II
GND via 50 Ω resistor
+18 V and -18 V via 50 Ω resistor
Pulse distortion: less than 1 msec

E Signaling Types

British Telecom SSSDC5
EIA RS-464/FCC Part 68:
Types I and II
+18 V and -18 V via resistor
E Detector Current Threshold:
6 mA or more: active state
3 mA or less: passive state

Ring Detector

Impedance:
4-7 k Ω @ 20 Hz, 70 VRMS
>10 k Ω @ 300-3400 Hz
@ 0 dBm or less
Ring Detector Level:
Ring Detection: >14 VRMS
No Ring: <11 VRMS

Voice Transmission, Phone & PABX Interface

Transformer isolation between the
two voice interfaces (1500 VRMS),
600 ohm nominal impedance
Return Loss:
Better than 17 dB
@ 300 Hz to 3400 Hz
Frequency Response:
(1dB (300 to 3400 Hz,
reference @1004 Hz)

Insertion Loss

Telephone/Extension to mux
interface (each direction):
4-wire: 3 dB ((0.5)
2-wire: 1 dB ((0.5)

On Hook/Off Hook

DC Impedance:
Off Hook: 150 ohm, (50 ohm
On Hook: Higher than 1 M Ω

Indicators

Power: On when unit is
powered (green)
Ring: On when detecting
a ring (yellow)
Remote Off Hook:
On when remote
subscriber goes
off hook (yellow)

Power

100, 115 or 230 V (-15% to +10%)
47-63 Hz, 12 VA

Physical (VSC-X)

Height: 40 mm / 1.6 in
Width: 180 mm / 7.0 in
Depth: 250 mm / 10.0 in
Weight: 1.7 kg / 3.7 lb

Environment

Temperature: 0-50°C/32-122°F
Humidity: Up to 90%,
non-condensing

ORDERING

VSC-X*

Voice and Signaling Converter,
stand-alone unit with internal power
supply

VSC-X/R

Voice and Signaling Converter, card
for VSC-MN 19" card-cage

VSC-MN*

19" card-cage for 14 VSC-X/R cards.
Power supply included

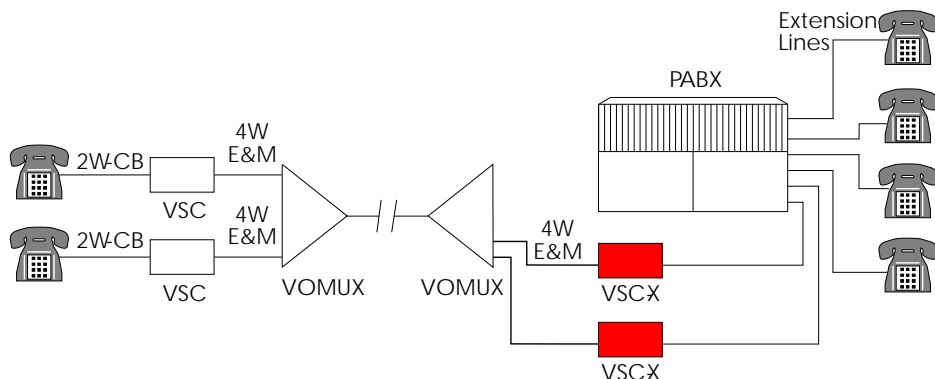
* Specify:

230 for 230 VAC operation

115 for 115 VAC operation

100 for 100 VAC operation

APPLICATION



Typical Application for VSC-X with VSC

Specifications are subject to change without
prior notification



data communications

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