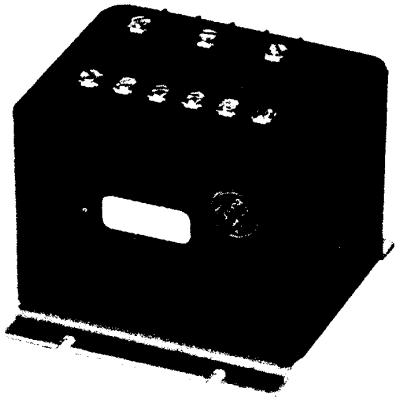
ENGINEERING PRODUCT SPECIFICATION RELEASE

E-1153-V

THREE PHASE VOLTAGE TRANSDUCER

MODELS: V53P and V53L

DESCRIPTION



The BEC model V53P monitors the phase to phase voltages of three-wire and four-wire, three-phase electrical systems. The V53L monitors the line-to-neutral voltage of four-wire electrical systems. These transducers can be used on 208, 240, and 480 volt three-phase systems. These transducers provide three separate 4-20mA outputs which are proportional to the three-phase input voltages.

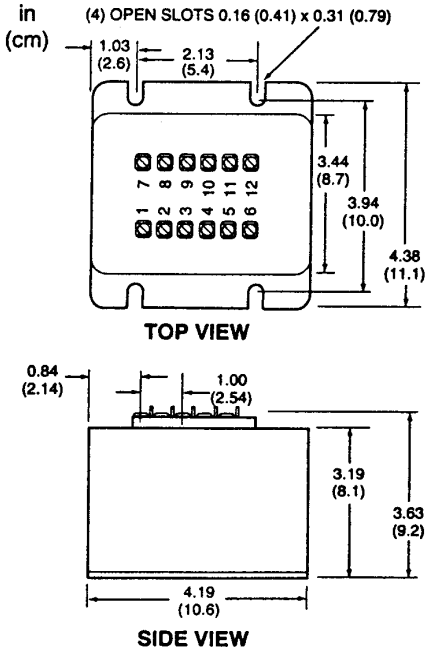
FEATURES

* 208, 240, and 480V three-phase systems
* Phase-to-phase and line-to-neutral voltage monitoring
* Can be used on 50 Hz systems
* Three 4-20mA outputs for monitoring each input voltage separately
* Operates on 24 VDC power supply
* Power supply input has reverse polarity protection
* Mounting feet for ease of installation

SPECIFICATIONS

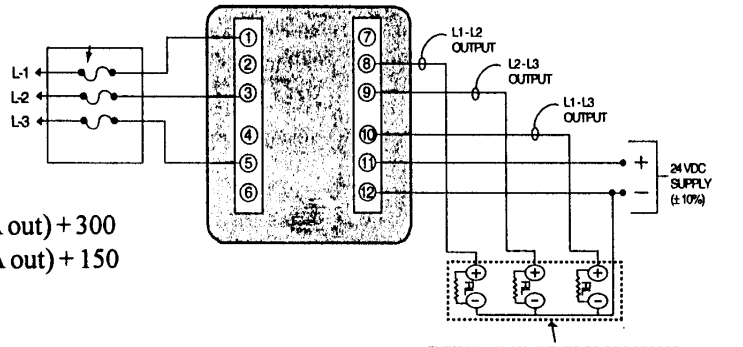
V53P-480 (phase-to-phase)	
Low range voltage input	180-300 volts
High range voltage input	360-600 volts
V53P-120 (phase-to-phase)	
Voltage input range	90-150 volts (For 3-phase P.T. secondaries)
V53L-120 (line-to-neutral)	
Voltage input range	90-150 volts (For 208 & 240V 3-phase systems
V53L-240 (line-to-neutral)	
Voltage input range	180-300 volts (For 480V 3-phase systems
Input burden	0.1VA max
Frequency	50/60 Hz
Continuous overload	600 volts
Power supply voltage	24 VDC + or - 10%
Power supply current	150mA max
Output	4-20mA DC
Max loop resistance	600ohms/output
Accuracy	0.5% of full scale
Output ripple	< 1%
Response time	< 1.50 sec (10%-90%)
Dielectric test (1min)	1300 volts min
Operating temp range	-22 to 140F (-30 to 60C
Shipping weight	1.3 lb (0.56kg)
Approvals	UL recognized

DIMENSIONS



V53P Wiring

Wiring shown for
480V/30/60 Hz
(See Note 1 for other voltages)



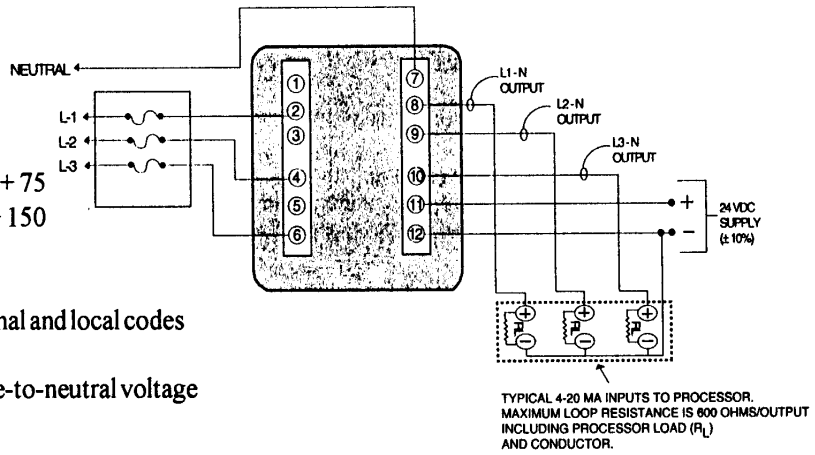
APPLICATION:

* Phase-to-phase voltage monitoring
* V53P-480 Voltage in (high range) = 15 (mA out) + 300
* V53P-480 Voltage in (low range) = 7.5 (mA out) + 150
* V53P-120 Voltage in = 3.75 (mA out) + 75

Note:

1. Wiring shown is for high range voltage input (360-600volts). For low range voltage (180-300 volts), wire to terminals 2,4 and 6 instead of 1,3 and 5.
2. V53P-120: Wire to terminals 2,4 and 6.
3. The installation must conform to all national and local codes and regulations.

V53L Wiring



APPLICATION:

* Line-to-neutral voltage monitoring
* Voltage in (V53L-120) = 3.75 (mA out) + 75
* Voltage in (V53L-240) = 7.5 (mA out) + 150

Note:

1. The installation must conform to all national and local codes and regulations.
2. The V53L is suitable for single-phase (line-to-neutral voltage monitoring.

ORDERING INFORMATION

V53P-480	Phase-to-Phase Voltage Monitor	180-300/360-600volts (208,240 or 480 volt systems)
V53P-120	Phase-to-Phase Voltage Monitor	90-150 volt (3-phase potential transformer secondaries)
V53L-120	Line-to-Neutral Voltage Monitor	90-150 volts (208 or 240 volt systems)
V53L-240	Line-to-Neutral Voltage Monitor	180-300 volts (480 volt systems)