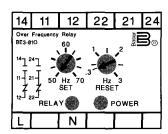


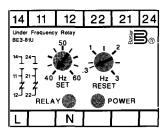
BE3-81O, BE3-81U, BE3-81O/U FREQUENCY RELAYS

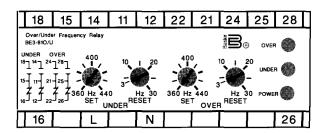
APPLICATION:

BE3 frequency relays provide monitoring, and if the frequency deviates outside the user-adjustable preset limits, the relay will operate. Typically used in protecting generators against over or under speed, this is achieved as speed is proportional to frequency. Other uses include monitoring utility mains power supplies and computer supplies. The user is provided with adjustment of both the trip point of frequency being monitored and the differential. BE3 frequency relays energize when the input signal exceeds the trip point, i.e. relay energizes on trip, unless option of de-energize on trip is requested. A red LED indicates the state of the relay, while a green LED indicates the condition of the power supply. The frequency relay monitors its own power supply so no auxiliary power is necessary.

CASE CONNECTIONS:







GENERAL SPECIFICATIONS:

Input

Nominal voltage: 120V, 240V, 380V, 480V
Other nominal voltages: Contact the factory
Frequency: 50Hz, 60Hz, or 400Hz
Burden: Less than 2.5VA per phase
Overload: 1.5 times nominal continuous.

2 times nominal for 3 seconds

All units self-powered.

Setpoint

Range: 50Hz nominal Adjustable 40 to 60Hz
60Hz nominal Adjustable 50 to 70Hz
400Hz nominal Adjustable 360 to 440Hz
Differential: 50 & 60Hz
400Hz Adjustable 0.3 to 3Hz
Adjustable 3 to 30Hz
Reportability:

Repeatability: Better than 0.5% of full span

Operating time: 200 ms, typical

Weight and Case Size

Single unit: 0.88 lbs. (0.4kg)

2.17 in. wide (55mm)

Combined unit: 1.32 lbs. (0.6kg)

3.93 in. wide (100mm)



PERFORMANCE SPECIFICATIONS:

Environmental Safety:

Operating temperature: 0°C to +60°C (32°F to 140°F)

Functional temperature: -25° C to $+70^{\circ}$ C (-13° F to 158° F) Storage temperature: -40° C to $+70^{\circ}$ C (-40° F to 158° F)

Temperature coefficient: 0.03% per °C (200ppm/°C)

UL recognized, CSA certified, C.E. compliant

Relative humidity:

Agency Approvals

Insulation

Test voltage:

Impulse test:

95% noncondensing

Relay Output

RFI:

Surge withstand:

Relay type: D.P.D.T.

AC Rating: 250V, 5A, nonresistive,1200VA DC Rating: 125V, 1A, resistive, 120 watts

Mechanical Life: 5 million operations

Input, Case, and Auxiliary

EMC 5kV transient, complies

4kV RMS 50Hz 1min between

with IEC 801, EN 55020 EHF 2.5kV 1MHz, complies

with IEC 255-4

Protection class: II, complies with IEC 348

Enclosure

Mounting: Snap onto DIN rail 1.38in. x

.29in.(35mmx7.5mm),

BS EN 61010, DIN 57411, VDE 0411, ANSI C37

RFI degree N. complies with

IEC 801, EN 55020,

ANSI C37-90a

VDE 0875

complies with DIN-EN 50022,

BS 5584 Any position

Enclosure code:

nciosure code: Case

Material: Complies with UL 94 VO

Case IP 50, terminals IP 30

Applied Standards

HF interference test:

General: IEC 144, BS 5420,

VDE/VDI 0435, IEC 947,

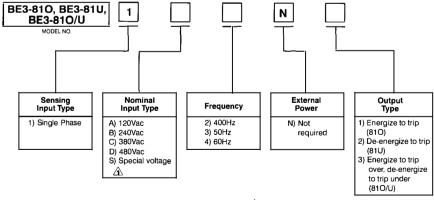
EN 60947

HOW TO ORDER:

Designate the Model Number followed by the complete Style Number.

Complete the Style Number by selecting one feature from each column of the Style Identification Chart and entering its designation, letter or number, in the appropriate square. Note: The description of a complete relay must include both Model Number and Style Number.

STYLE IDENTIFICATION CHART:



 Λ For other voltage applications, contact the factory.



Visit

ROUTE 143, BOX 269, HIGHLAND, ILLINOIS U.S.A. 62249 PHONE 618-654-2341 FAX 618-654-2351 P.A.E. Les Pins, 67319 Wasselonne Cedex FRANCE PHONE (33-3-88) 87-1010 FAX (33-3-88) 87-0808