

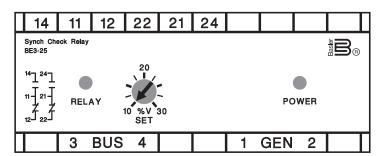
BE3-25 SYNCHRONIZING CHECK RELAYS



APPLICATION:

The BE3-25 series are synchronizing check relays, also known as paralleling relays. They are used to ensure that two AC supplies are synchronized. For a system to be synchronized, the frequency, phase angle, and voltage must be within preset limits. The BE3-25-****4 can monitor either utility mains bus bar and incoming generator, or two generators. The BE3-25-****4 offers user adjustment of the reset voltage from 10 to 30%. This voltage corresponds to 6 to 20 electrical degrees. The unit compares the input voltage and phase relationship of the bus bar to that of the generator. When the signal is within the preset limits, the relay energizes. The BE3-25-***5 operates as the BE3-25-***4, but has the additional feature of a dead bus facility. This enables the relay to energize with a generator supply only, which is a common requirement when utility mains failure occurs.

CASE CONNECTIONS:



GENERAL SPECIFICATIONS:

Input

Overload:

Nominal voltage: 120V, 240V, 380V, 480V Other nominal voltages: Contact the factory

Frequency: 50/60 or 400Hz

Burden: Less than 4VA terminals

marked GEN, less than 2VA

terminals marked BUS

1.5 times nominal voltage continuous. 10 times nominal

voltage for 3 seconds

All units self-powered.

Set point

Range: Adjustable 10% to 30% of

generator voltage

(6-20 electrical degrees)

Differential: Fixed at 5%

Repeatability: Better than 0.5% of full span

Operating time: 500ms, typical

Weight and Case Size

Approx. 1.32 lbs. (0.6kg), 3.94 in. wide (100mm)



PERFORMANCE SPECIFICATIONS:

Environmental

Operating temperature: 0°C to 60°C (32°F to 140°F) Functional temperature: -25°C to 70°C (-13°F to 158°F) Storage temperature: -40°C to 70°C (-40°F to 158°F) Temperature coefficient: 0.03% per °C (200ppm/°C) Relative humidity: 95% noncondensing

Agency Approvals

cULus listed to UL 508 and CSA C22.2 No. 14

CE compliant

Gost R certified #POCC US.ME05.B03391

Insulation

Test voltage: 4kV RMS 50Hz 1min between

Input, Case, and Auxiliary

EMC 5kV transient, complies Impulse test:

with IEC 801, EN 55020

HF interference test: EHF 2.5kV 1MHz, complies

with IEC 255-4

Protection class: II, complies with IEC 348

Applied Standards

General: IEC 144, BS 5420,

VDE/VDI 0435, IEC 947,

EN 60947

Safety: BS EN 61010, DIN 57411,

VDE 0411, ANSI C37

Surge withstand: IEC 801, EN 55020,

ANSI C37-90a

RFI: RFI degree N, complies with

VDE 0875

Relay Output

Relay type: D.P.D.T.

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

Mechanical Life: 5 million operations

Enclosure

Mounting: Snap onto DIN rail 1.38in. x

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

complies with DIN-EN 50022,

BS 5584

Any position

Enclosure code: Case IP 50, terminals IP 30 Material: Complies with UL 94 VO

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:

