STARTCO
ENGINEERING LTD.

406 Jessop Avenue   Saskatoon, Saskatchewan   Canada S7N 2S5   Ph: (306) 373-5505   Fx: (306) 374-2245   www.startco.ca

Manuals and additional
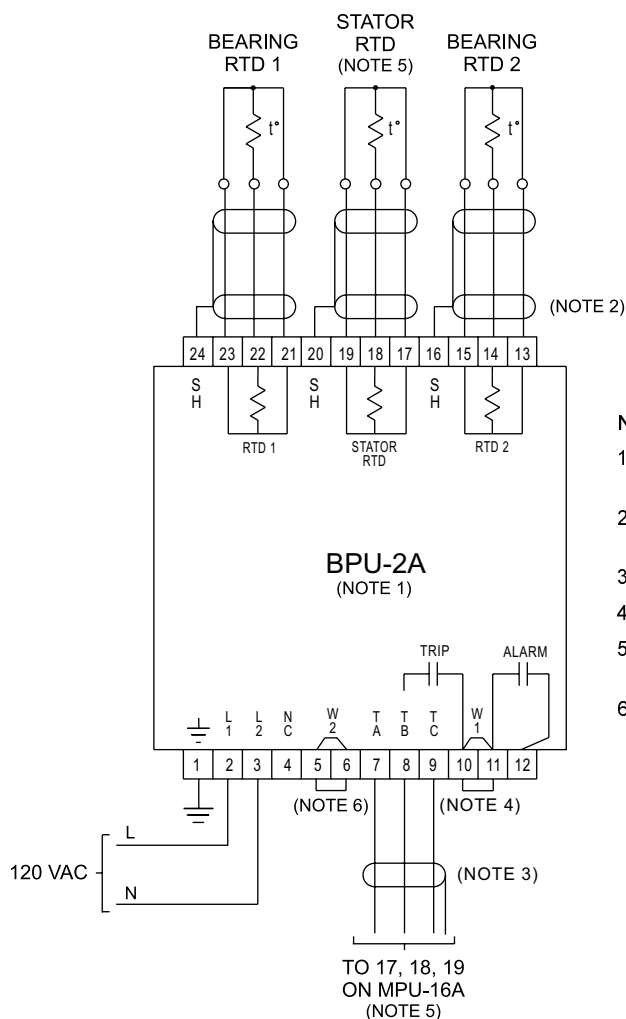information available at
www.startco.ca

BPU-2A

BEARING PROTECTION UNIT

The BPU-2A is a microprocessor-based bearing protection unit. Trip and alarm set points and LED indication are provided for two bearing RTD's. The BPU-2A can be user configured for 100-ohm platinum (PT100), 100-ohm nickel (NI100), or 120-ohm nickel (NI120) RTD's. The BPU-2A can trip and alarm on bearing temperature and on the temperature differential between two bearings. Indication is provided for open or shorted RTD's.

The BPU-2A was designed to add bearing-temperature protection to the MPU-16A Motor Protection Unit; however, it can be used as a stand-alone unit to monitor two bearing RTD's. In the stand-alone configuration, two Form A output contacts can be user configured for fail-safe or non-fail-safe operation.

TYPICAL APPLICATION

BEARING RTD 1
STATOR RTD (NOTE 5)
BEARING RTD 2

(NOTE 2)

24 23 22 21 20 19 18 17 16 15 14 13

SH | RTD 1 | SH | STATOR RTD | SH | RTD 2

BPU-2A
(NOTE 1)

TRIP   ALARM

⏚ L1 L2 NC W2 TA TB TC W1

1 2 3 4 5 6 7 8 9 10 11 12

(NOTE 6)   (NOTE 4)

120 VAC — L / N

(NOTE 3)

TO 17, 18, 19
ON MPU-16A
(NOTE 5)

NOTES:

1. SURFACE-MOUNT CONFIGURATION SHOWN, FRONT VIEW.

2. GROUND RTD CABLE SHIELDS AT BPU-2A ONLY.

3. GROUND CABLE SHIELD AT MPU-16A ONLY.

4. REMOVE W1 FOR STAND-ALONE OPERATION.

5. DO NOT CONNECT FOR STAND-ALONE OPERATION.

6. REMOVE W2 FOR LATCHING OPERATION.

TECHNICAL SPECIFICATIONS

Supply:
120 or 240 Vac (+10%, -30%), 50/60 Hz, 5 VA

Dimensions:
Height . . . . 96 mm (3.8")
Width . . . . 96 mm (3.8")
Depth . . . . 101 mm (4.0")

Output Relays:
Contact Rating . . . . 1 mA to 8 A Resistive, 250 Vac or 30 Vdc. 0.125 hp @ 120/240 Vac.
Contact Configuration. . . . . Form A
Operating Mode. . . . . Fail Safe or Non Fail Safe

Bearing-RTD Inputs:
RTD Type . . . . 100-Ω Platinum (DIN43760), 100-Ω Nickel, or 120-Ω Nickel
Lead Compensation . . . . 25 Ω Max
Temperature Range. . . . . 60°C to 120°C
Differential Range. . . . . 10° to 20°
Accuracy . . . . ± 3°C

Stator-RTD Input:
RTD Type . . . . 100-Ω Platinum (DIN43760), 100-Ω Nickel, or 120-Ω Nickel

Environment:
Operating Temperature . . . . -40°C to 60°C
Storage Temperature . . . . -55°C to 80°C

ORDERING INFORMATION

BPU-2A- ☐ ☐ ☐ -00

Mount:
P   Panel
S   Surface

Supply Voltage:
12   120 Vac, 50/60 Hz
24   240 Vac, 50/60 Hz

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