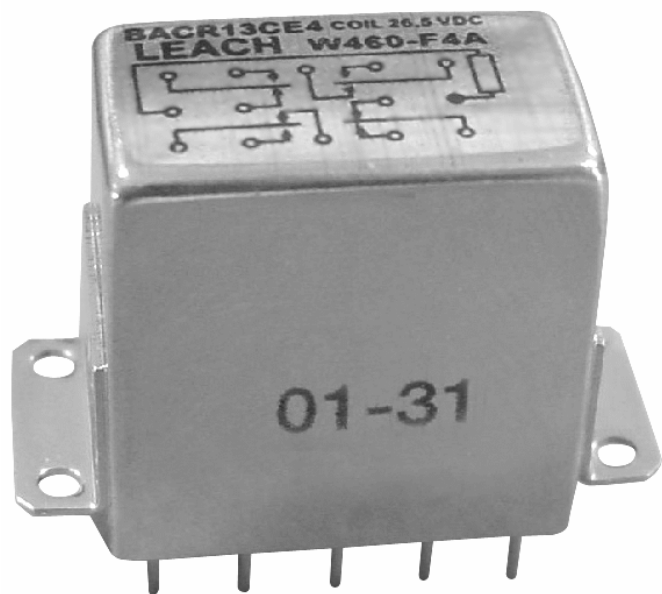


ENGINEERING DATA SHEET

WN460

RELAY - NONLATCH
4 PDT, 2 AMP



Non polarized, non latching hermetically sealed relay.

Contact arrangement **4 PDT**
Coil supply **Direct current**
Compatible with **MIL-R-39016/39**

PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at **2 Amp / 28Vdc**
Weight **34 grams max**
Dimensions of case **25.65mm x 15.5m x 25.4mm max**
without mounting brackets
Hermetically sealed corrosion protected metal can.

APPLICATION NOTE:

[001](#)

CONTACT ELECTRICAL CHARACTERISTICS

| Minimum operating cycles | Contact rating per pole and load type | Load Current in Amps | |
|--------------------------|---|----------------------|------------------|
| | | @28Vdc | @115Vac/60-400Hz |
| 100,000 cycles | Relay case grounded: resistive load inductive load (0.2H) | 2 | 0.25 |
| 100,000 cycles | | 0.25 | - |
| 100,000 cycles | Relay case not grounded: resistive load inductive load (0.2H) lamp load | - | 1 |
| 100,000 cycles | | 0.5 | - |
| 100,000 cycles | | 0.25 | - |
| 1,000,000 cycles | low level (50µA/50mV max) | - | - |
| 100 cycles | resistive overload | 4 | - |



Leach International
www.leachintl.com

North America
6900 Orangethorpe Ave.
P.O. Box 5032
Buena Park, CA 90622 USA

Tel: (01) 714-736-7599
Fax: (01) 714-670-1145

Europe, SA
2 Rue Goethe
57430 Sarralbe
France

Tel: (33) 3 87 97 98 97
Fax: (33) 3 87 97 84 04

Asia-Pacific Ltd.
20/F Shing Hing Commercial Bldg.
21-27 Wing Kut Street
Central, Hong Kong

Tel: (852) 2 191 2886
Fax: (852) 2 389 5803

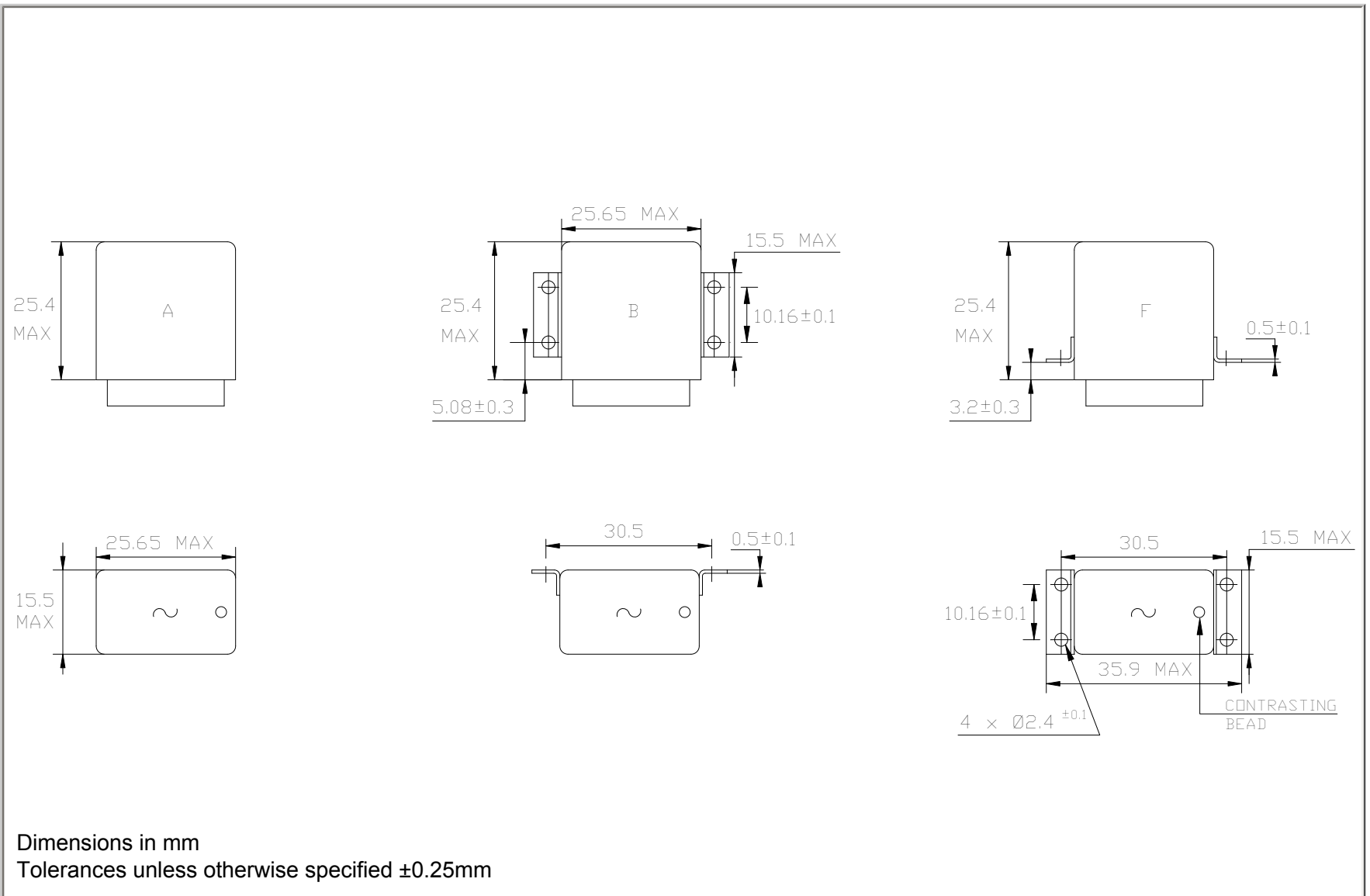
Data sheets are for initial product selection and comparison. Contact Leach International prior to choosing a component.

COIL CHARACTERISTICS (Vdc)**WN460**

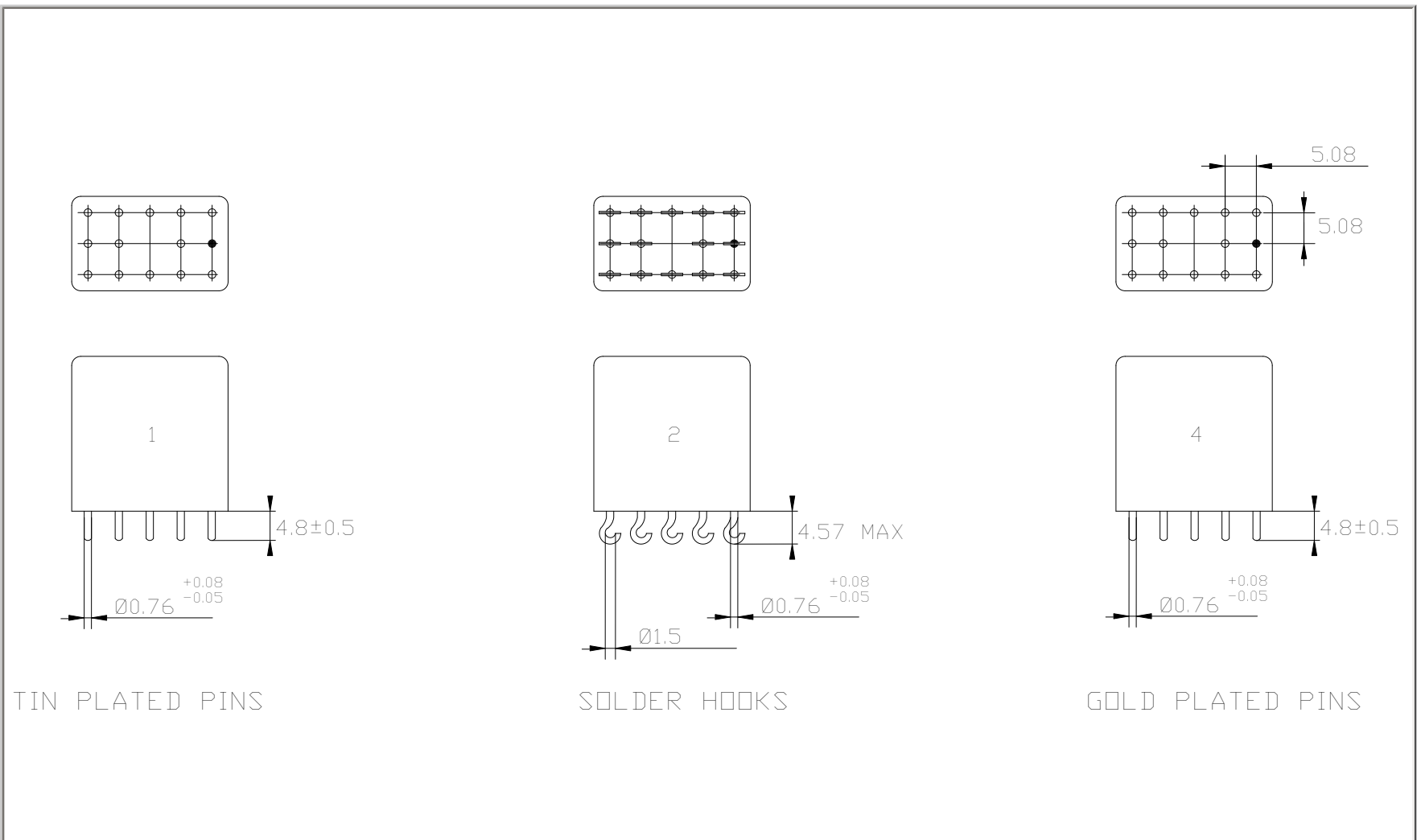
| CODE | A | B | C |
|--|------|------|------|
| Nominal operating voltage | 26.5 | 12 | 6 |
| Maximum operating voltage | 32 | 16.5 | 8.5 |
| Maximum pickup voltage at +125° C | 18 | 8.8 | 4.55 |
| Guaranteed drop-out voltage at -65° C | 1 | 0.5 | 0.25 |
| Coil resistance in $\Omega \pm 10\%$ at +25° C | 500 | 117 | 32 |

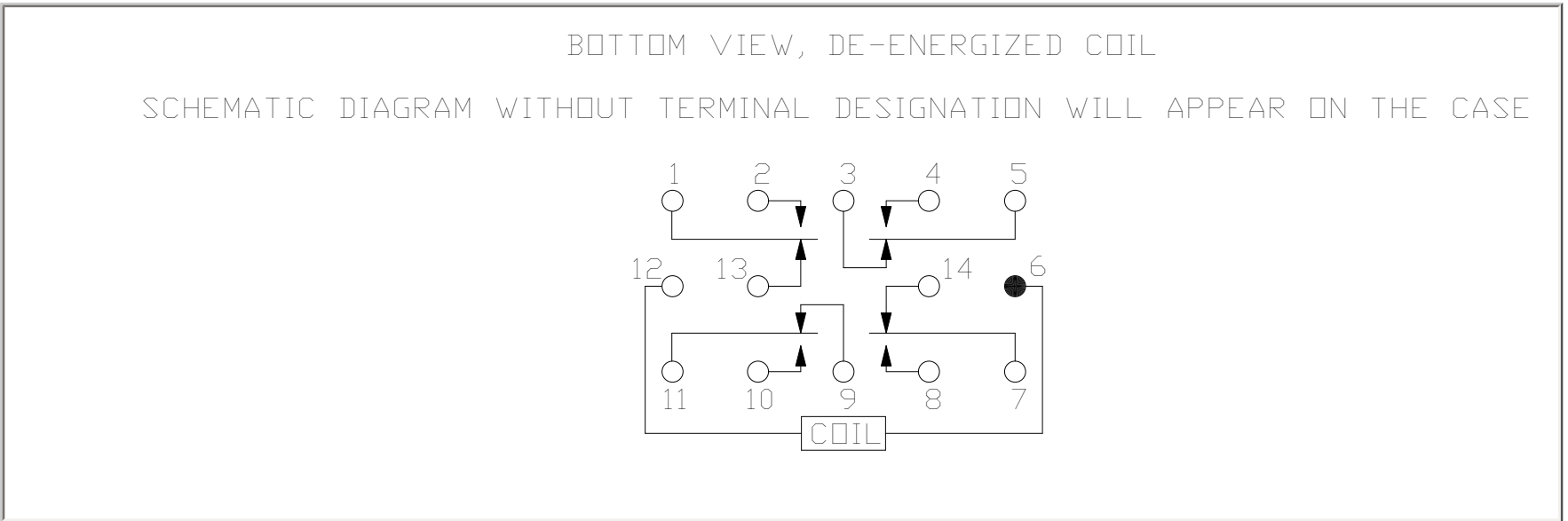
GENERAL CHARACTERISTICS

| | |
|---|---|
| Temperature range | -65°C to +125°C |
| Dielectric strength at sea level -between case, frame or enclosure and coil -between open contacts -others | 500 Vrms / 50 Hz 500 Vrms / 50 Hz 1000 Vrms / 50 Hz |
| Dielectric strength at altitude 25,000 m, all terminals to ground | 350 Vrms / 50 Hz |
| Initial insulation resistance at 100 Vdc | >1000 M Ω |
| Sinusoidal vibration | 30 G / 10 to 3000 Hz |
| Shock | 50 G / 11 ms |
| Maximum contact opening time under vibration and shock | 10 μ s |
| Operate time at nominal voltage | 6 ms max |
| Release time | 5 ms max |
| Bounce time | 2 ms max |
| Contact resistance at nominal current -initial value -after life | 50 m Ω max 100 m Ω max |



TERMINAL TYPES





NUMBERING SYSTEM

| | | | | | |
|--------------------------------|-------|---|---|---|---|
| | WN460 | - | * | * | * |
| Basic series designation _____ | | | | | |
| 1-Mounting Style (A,B,F) _____ | | | | | |
| 2-Terminal Types (1,2,4) _____ | | | | | |
| 3-Coil Voltage (A,B,C, _____) | | | | | |

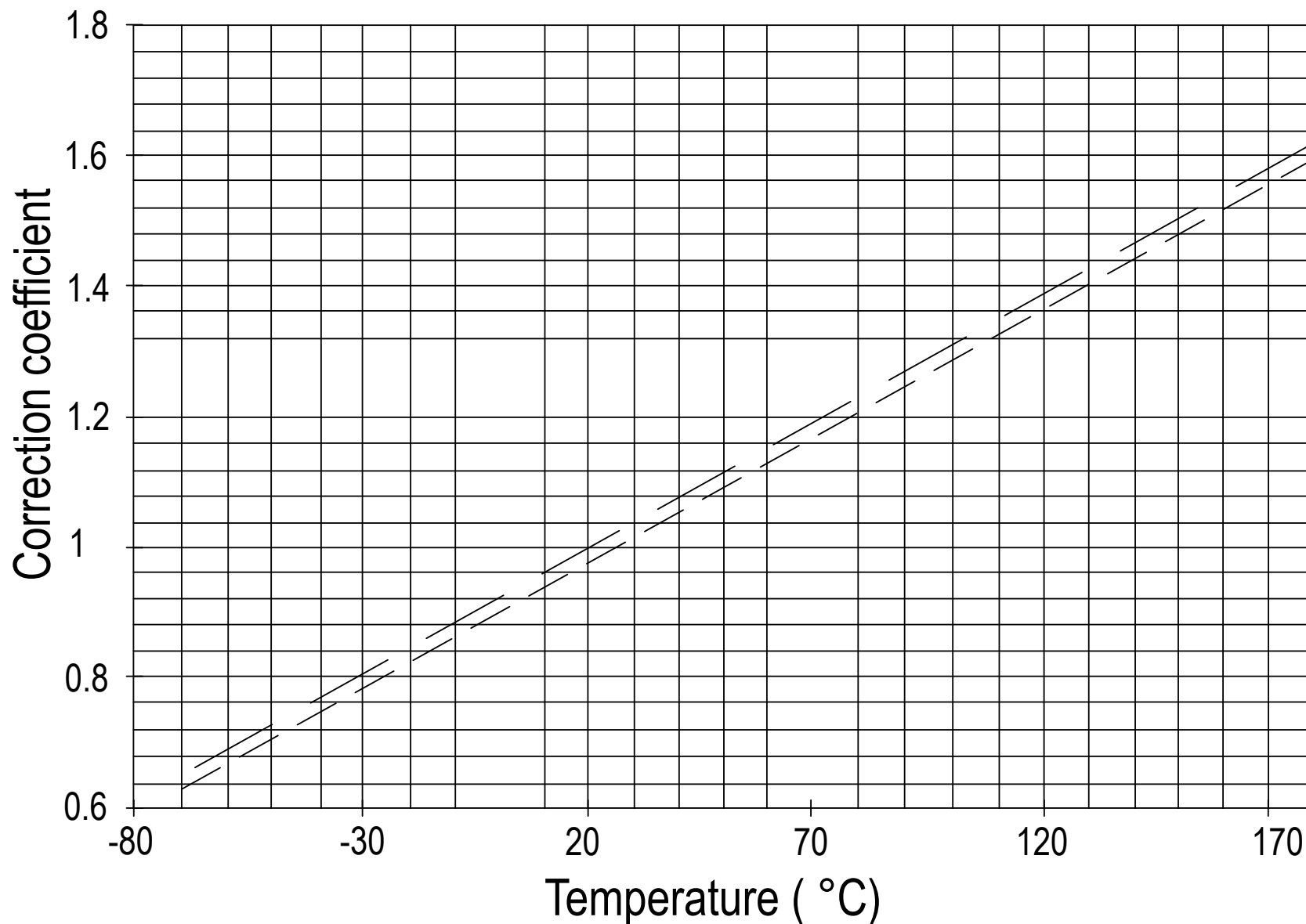
NOTES

1. Ultra sonic cleaning may adversely effect the normally closed contacts

TYPICAL CHARACTERISTICS

- Coil L/R ratio for all coil = 1.5 ms
- Coil resistance/temperature change: See application note no. 001

**CORRECTION DUE TO COIL COPPER WIRE RESISTANCE
CHANGE IN TEMPERATURE**



— — Nominal Resistance at 25°C

———— Nominal Resistance at 20°C

Example: Coil resistance at 25°C: 935 ohms. What is it at 125°C?

Correction coefficient on diagram is: 1.39 at 125°C. R becomes: $935 \times 1.39 = 1299$ Ohms

Correction also applies to operating voltages