PRESSURE, VACUUM AND TEMPERATURE

FEATURES

- Compact Size
- Wide Selection of Adjustable Ranges:
  Pressure: 30" Hg Vac to 6000 psi (-1 to 413.7 bar)
  Temperature: -130 to 650°F (-90 to 343.3°C)
- Choice of One or Two Switch Outputs
- Adjustable or Narrow Deadband Options
- Reference Dial or Hex Screw Set Point Adjustment
The 54 Series offers the OEM a combination of reliable performance and low cost. Available in pressure and temperature versions, with single or dual SPDT outputs and enclosed or open frame (skeleton) construction, the 54 Series family provides design versatility.

The 54 has been field-proven in a wide variety of OEM applications, including medical, laboratory, fire protection and heating equipment.

**OVERVIEW**

**FEATURES**

- Compact size
- Choice of one or two switch outputs
- Reference dial or hex screw-type setting
- Optional 1/2" NPT (male) by 1/8" NPT (female) polysulfone® pressure connection
- Optional external manual reset
- NEMA 1 or open frame (skeleton) versions for OEM applications
- Brass bellows models

Polysulfone® is a registered trademark of Amoco
SPECIFICATIONS

STORAGE TEMPERATURE LIMITS
-65 to 160°F (-54 to 71°C)

AMBIENT TEMPERATURE LIMITS

Pressure Models
Models 126-164, 610-614: -40 to 160°F (-40 to 71°C);
Models 22-28, 16008, 16009: 0 to 160°F (-18 to 71°C)

Temperature Models
-40 to 160°F (-40 to 71°C). Set point typically shifts less than 1% of range for a 50°F (28°C) ambient temperature change.

SHOCK
Set point repeats after 15 G, 10 millisecond duration

VIBRATION
Set point repeats after 2.5 G, 5-500 CPS

ENCLOSURE CLASSIFICATION
Types C54, C54A, B54, F54, E54, J54, J54A, H54: complies with NEMA 1 requirements.
Types C54S, B54S, F54S, E54S, J54S, J54AS, H54S: not applicable

SET POINT REPEATABILITY
Pressure Models
Models 22-28, 16008-16009, 126-164: ±1% of full scale range;
Models 610-614: ±1.5% of full scale range

Temperature Models
±1% of full scale range

SWITCH OUTPUT
One or two SPDT snap action switch(es); dual switch may be separated up to 100% of range; switches may be wired “normally open” or “normally closed”

ELECTRICAL RATING
15A 125/250/480 VAC resistive except models 16008-16009 – 20A 480/VAC. Electrical switches have limited DC capabilities. Consult UE for additional information.

ENCLOSURE MATERIAL
Lexan® black finish for Types J54, J54A, H54, B54, C54, C54A, E54, F54 only

WEIGHT
Approximately 12 oz.

ELECTRICAL CONNECTION
Types J54 & H54, C54, C54A, B54, E54, F54: 7/8” diameter hole; Type J54A: 1-1/16” diameter hole

PRESSURE CONNECTION
Models 22-28, 16008, 16009: 1/4” NPT (male); 126-164, 610-614: 1/4” NPT (female)

TEMPERATURE ASSEMBLY
Bulb and Capillary: 6 feet copper or 304 stainless steel capillary
Immersion Stem: Brass

TEMPERATURE FILL
Non-toxic oil

TEMPERATURE DEADBAND
Typically 1% of range under laboratory conditions (70°F circulating bath at rate of 1/2°F per minute change)

APPROVALS

UNITED STATES AND CANADA
Type J54, J54A, H54
UL Listed, cUL Certified
Pressure: UL 508, CSA C22.2 No. 14, file # E42272

Type J54S, J54AS, H54S
UL Recognized, cUL Recognized
Pressure: UL 508, CSA C22.2 No. 14, file # E42272

Type B54, C54, E54, F54
UL listed, CSA Certified
Temperature: UL 873, file # E10667;
CSA C22.2 No. 0 & 24, file # LR7814

Type B54S, C54S, E54S, F54S
UL Recognized, CSA Certified
Temperature: UL 873, file # E10667;
CSA C22.2 No. 0 & 24, file # LR7814

Canadian Registration Number (CRN): Refer to www.ueonline.com/certifications for list of approved models

EUROPE

Low Voltage Directive (LVD) (2006/95/EC)
UEC compliant to LVD
Products rated lower than 50 VAC and 75 VDC are outside of the scope of the LVD
The Low Voltage Directive does not apply to open frame (skeleton) models.

Pressure Equipment Directive (PED) (97/23/EC)
Compliant to PED
Products rated lower than 7.5 psi are outside the scope of the PED

Lexan® is a registered trademark of SABIC Innovative Plastics
**54 Series**

### Pressure Model Chart

#### 54 Series

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjustable Set Point</th>
<th>Deadband</th>
<th>Over Range Pressure*</th>
<th>Proof Pressure**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low end of range on fall;</td>
<td>psi (unless noted)</td>
<td>psi (unless noted)</td>
<td>psi</td>
</tr>
<tr>
<td></td>
<td>High end of range on rise</td>
<td>bar (unless noted)</td>
<td>bar (unless noted)</td>
<td>bar</td>
</tr>
</tbody>
</table>

#### JS4, JS4A, JS4S, H54, H54S

Buna N diaphragm and O-Ring with 1/4” NPT (male) aluminum pressure connection; limited to process temperature below 200°F

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjustable Set Point</th>
<th>Deadband</th>
<th>Over Range Pressure*</th>
<th>Proof Pressure**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>30” Hg Vac to 0</td>
<td>-1 to 0</td>
<td>1 to 3.5” Hg Vac</td>
<td>33.9 to 118, 5 mbar</td>
</tr>
<tr>
<td>24</td>
<td>3 to 30</td>
<td>0.2 to 2.1</td>
<td>0.4 to 1.5</td>
<td>27.6 to 89.6 mbar</td>
</tr>
<tr>
<td>25</td>
<td>10 to 100</td>
<td>0.7 to 6.9</td>
<td>1 to 2.5</td>
<td>68.9 to 172.4 mbar</td>
</tr>
<tr>
<td>27</td>
<td>30 to 300</td>
<td>2.1 to 20.7</td>
<td>1.3 to 4</td>
<td>89.6 to 275.8 mbar</td>
</tr>
<tr>
<td>28</td>
<td>50 to 500</td>
<td>3.4 to 34.5</td>
<td>1.5 to 6</td>
<td>103.4 to 344.7 mbar</td>
</tr>
</tbody>
</table>

J54, J54S

303 stainless steel piston and Buna N O-Ring with 1/4” NPT (female) pressure connection (not recommended for gas service since drying of the O-Ring can allow bleeding of the medium into the atmosphere)

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjustable Set Point</th>
<th>Deadband</th>
<th>Over Range Pressure*</th>
<th>Proof Pressure**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>126</td>
<td>30” Hg Vac to 0</td>
<td>-1 to 0</td>
<td>0.2 to 0.9” Hg</td>
<td>6.8 to 30.5 mbar</td>
</tr>
<tr>
<td>137</td>
<td>0 to 80 “wc</td>
<td>0 to 199.1 mbar</td>
<td>1 to 8 “wc</td>
<td>2.5 to 19.9 mbar</td>
</tr>
<tr>
<td>144</td>
<td>0 to 20</td>
<td>0 to 1.4</td>
<td>0.1 to 0.5</td>
<td>6.9 to 34.5 mbar</td>
</tr>
<tr>
<td>146</td>
<td>0 to 30</td>
<td>0 to 2.1</td>
<td>0.1 to 0.6</td>
<td>6.9 to 41.4 mbar</td>
</tr>
<tr>
<td>152†</td>
<td>0 to 50</td>
<td>0 to 3.4</td>
<td>0.1 to 0.7</td>
<td>6.9 to 48.3 mbar</td>
</tr>
<tr>
<td>156</td>
<td>0 to 100</td>
<td>0 to 6.9</td>
<td>0.2 to 0.8</td>
<td>13.8 to 55.2 mbar</td>
</tr>
<tr>
<td>164</td>
<td>0 to 200</td>
<td>0 to 13.8</td>
<td>0.3 to 2</td>
<td>20.7 to 137.9 mbar</td>
</tr>
</tbody>
</table>

Brass bellows with nickel-plated brass 1/4” NPT (female) pressure connection; Model 126 has a zinc-plated steel spring exposed to media

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjustable Set Point</th>
<th>Deadband</th>
<th>Over Range Pressure*</th>
<th>Proof Pressure**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>126†</td>
<td>30” Hg Vac to 0</td>
<td>-1 to 0</td>
<td>0.2 to 0.9” Hg</td>
<td>6.8 to 30.5 mbar</td>
</tr>
<tr>
<td>137†</td>
<td>0 to 80 “wc</td>
<td>0 to 199.1 mbar</td>
<td>1 to 8 “wc</td>
<td>2.5 to 19.9 mbar</td>
</tr>
<tr>
<td>144†</td>
<td>0 to 20</td>
<td>0 to 1.4</td>
<td>0.1 to 0.5</td>
<td>6.9 to 34.5 mbar</td>
</tr>
<tr>
<td>146†</td>
<td>0 to 30</td>
<td>0 to 2.1</td>
<td>0.1 to 0.6</td>
<td>6.9 to 41.4 mbar</td>
</tr>
<tr>
<td>152††</td>
<td>0 to 50</td>
<td>0 to 3.4</td>
<td>0.1 to 0.7</td>
<td>6.9 to 48.3 mbar</td>
</tr>
<tr>
<td>156††</td>
<td>0 to 100</td>
<td>0 to 6.9</td>
<td>0.2 to 0.8</td>
<td>13.8 to 55.2 mbar</td>
</tr>
<tr>
<td>164††</td>
<td>0 to 200</td>
<td>0 to 13.8</td>
<td>0.3 to 2</td>
<td>20.7 to 137.9 mbar</td>
</tr>
</tbody>
</table>

#### J54, J54S

Buna N diaphragm and O-Ring with 1/4” NPT (male) brass pressure connection; includes adjustable deadband microswitch.

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjustable Set Point</th>
<th>Adjustable Deadband</th>
<th>Over Range Pressure*</th>
<th>Proof Pressure**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>610</td>
<td>75 to 1000</td>
<td>5.2 to 68.9</td>
<td>30 to 150</td>
<td>2.1 to 10.3</td>
</tr>
<tr>
<td>612</td>
<td>125 to 3000</td>
<td>8.6 to 206.8</td>
<td>40 to 250</td>
<td>2.8 to 17.2</td>
</tr>
<tr>
<td>614</td>
<td>700 to 6000</td>
<td>48.3 to 413.7</td>
<td>50 to 400</td>
<td>3.4 to 27.6</td>
</tr>
</tbody>
</table>

### Notes

*Over Range Pressure: The Maximum pressure that may be applied continuously without causing damage and maintaining set point repeatability.

**Proof Pressure: The maximum pressure to which a pressure sensor may be occasionally subjected, which causes no permanent damage. The unit may require calibration (e.g., start-up, testing).

† Model not available for types H54, H54S

†† Model not available for type J54.

††† Model not available for type J54S.
## 54 Series

### Temperature Model Chart

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjustable Set Point Range</th>
<th>Max. Temperature °F</th>
<th>Max. Temperature °C</th>
<th>Scale***</th>
<th>Stem Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>°F</td>
<td>°F</td>
<td>°F</td>
<td>°F</td>
<td>°C</td>
</tr>
<tr>
<td>B54, B54S, C54, C54S, C54A, C54AS, Brass immersion stem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>0 to 225</td>
<td>250</td>
<td>121.1</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>109</td>
<td>200 to 425</td>
<td>425</td>
<td>218.3</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E54, F54, Copper bulb and capillary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D20BC</td>
<td>-130 to 120</td>
<td>170</td>
<td>76.7</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>D21BC</td>
<td>0 to 150</td>
<td>200</td>
<td>93.3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>D22BC</td>
<td>50 to 300</td>
<td>350</td>
<td>176.7</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>D23BC</td>
<td>150 to 650</td>
<td>700</td>
<td>371.1</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>E54, F54, Stainless steel bulb and capillary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D20BS‡</td>
<td>-130 to 120</td>
<td>170</td>
<td>76.7</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>D21BS</td>
<td>0 to 150</td>
<td>200</td>
<td>93.3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>D22BS</td>
<td>50 to 300</td>
<td>350</td>
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<td>10</td>
<td>5</td>
</tr>
<tr>
<td>D23BS</td>
<td>150 to 650</td>
<td>700</td>
<td>371.1</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>E54S, F54S, Copper bulb and capillary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D21BC</td>
<td>0 to 150</td>
<td>200</td>
<td>93.3</td>
<td>5</td>
<td>5</td>
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<tr>
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<td>700</td>
<td>371.1</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>E54S, F54S, Stainless steel bulb and capillary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D21BS</td>
<td>0 to 150</td>
<td>200</td>
<td>93.3</td>
<td>5</td>
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</tr>
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<td>D22BS</td>
<td>50 to 300</td>
<td>350</td>
<td>176.7</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>D23BS</td>
<td>150 to 650</td>
<td>700</td>
<td>371.1</td>
<td>25</td>
<td>10</td>
</tr>
</tbody>
</table>

‡ Not available Type F54

*** Applies to Types B54, B54S, E54, E54S only
HOW TO ORDER

BUILDING A PART NUMBER

Select a Type
Refer to the "Type" section below.
Determine type number based on switch output, enclosure, adjustment and reference.
Fill in the type portion of your part number with the corresponding number.

Select a Model
Refer to the "Model Charts."
Determine model based on adjustable range, deadband and proof pressure.
Fill in the model portion of your part number with the corresponding number.

Select an Option
Refer to the "Options" section.
Determine option number based on switch output, optional materials or other product enhancements.
Fill in the option portion of your part number with the corresponding number.
Leave "option" portion blank if no options are needed. FOR MULTIPLE OPTIONS: Call United Electric Controls.

TYPE DESCRIPTION - PRESSURE MODELS

J54: NEMA 1 enclosure; One SPDT output; internal hex adjustment with no reference dial
J54A: NEMA 1 enclosure; Two SPDT outputs; internal hex adjustment with no reference dial
J54S: Skeleton construction; One SPDT output; hex adjustment with no reference dial
J54AS: Skeleton construction; Two SPDT outputs; hex adjustment with no reference dial
H54: NEMA 1 enclosure; One SPDT output; internal adjustment with reference dial
H54S: Skeleton construction; One SPDT output; adjustment with reference dial

TEMPERATURE MODELS

C54: NEMA 1 enclosure; Immersion stem; one SPDT output; internal hex adjustment with no reference dial
C54A: NEMA 1 enclosure; Immersion stem; two SPDT outputs; internal hex adjustment with no reference dial
C54S: Skeleton construction; Immersion stem; one SPDT output; hex adjustment with no reference dial
C54AS: Skeleton construction; Immersion stem; Two SPDT outputs; hex adjustment with no reference dial
B54: NEMA 1 enclosure; Immersion stem; one SPDT output; internal adjustment with reference dial
B54S: Skeleton construction; Immersion stem; one SPDT output; adjustment with reference dial
F54: NEMA 1 enclosure; Bulb and capillary; one SPDT output; internal hex adjustment with no reference dial
F54S: Skeleton construction; Bulb and capillary; one SPDT output; hex adjustment with no reference dial
E54: NEMA 1 enclosure; Bulb and capillary; one SPDT output; internal adjustment with reference dial
E54S: Skeleton construction; Bulb and capillary; one SPDT output; adjustment with reference dial

SWITCH OPTIONS*

CODE DESCRIPTION
0140 Gold contacts, 1A 125 VAC resistive. NOT AVAILABLE ON MODELS 16008-16009.
0500 Close deadband, 5A 125/250 VAC resistive. NOT AVAILABLE ON B54, J54A, B54S, C54, C54S, C54A, C54AS, E54S, F54, F54S, AND MODELS 16008-16009.
1520 Adjustable deadband, 15A 125/250/480 VAC resistive. Adjustable wheel changes rise setting only. If adjustment of fall setting is required, use primary adjustment. NOT AVAILABLE ON TYPES J54A, J54AS, H54, H54S, PRESSURE MODELS 610-614, 16008-16009 & TEMPERATURE VERSIONS
1530 External manual reset, 15A 125/250/480 VAC resistive; reset on increasing pressure or temperature only. NOT AVAILABLE ON TYPES J54A, J54AS, H54S, B54S, C54, C54AS, C54S, E54S, F54S OR MODELS 610-614, 16008-16009
2000 20A 125/250/480 VAC resistive. NOT AVAILABLE ON MODELS 16008-16009.

* All switches have limited DC capabilities. Consult factory for details.
GENERAL OPTIONS

CODE  DESCRIPTION
M201  Factory set one switch; specify increasing or decreasing pressure or temperature and set point. NOT AVAILABLE ON TYPES J54A, J54AS, C54A, C54AS AND MODELS 16008-16009.
M202  Factory set two switches; specify increasing or decreasing pressure or temperature and set point. NOT AVAILABLE ON TYPES J54, J54S, H54, H54S, B54, B54S, C54, C54S, E54, E54S, F54, F54S
M270  Calibrated dial in Celsius. NOT AVAILABLE ON PRESSURE VERSIONS AND TYPES B54, B54S, C54, C54S, C54A, C54AS, F54, F54S
M277  Range indicated on nameplate in kPa or MPa. NOT AVAILABLE ON TEMPERATURE VERSIONS AND MODELS 16008-16009.
M278  Range indicated on nameplate in kg/cm². NOT AVAILABLE ON TEMPERATURE VERSIONS AND MODELS 16008-16009.
M444  Paper ID tag. NOT AVAILABLE MODELS 16008-16009.
M446  Stainless steel ID tag & wire attachment. NOT AVAILABLE MODELS 16008-16009.
M540  Viton® construction (deadband and low end range may increase slightly. Consult factory); Wetted parts include Viton® diaphragm and O-Ring plus standard connection material. NOT AVAILABLE MODELS 126-164, 16008-16009 OR TEMPERATURE VERSIONS

PRESSURE CONNECTION OPTIONS

M501  Polysulfone® pressure connection 1/2” NPT (male) x 1/8” NPT (female). NOT AVAILABLE MODELS 126-164, 610-614, 16008-16009 OR TEMPERATURE VERSIONS

OPTIONS FOR TEMPERATURE MODELS

UNION CONNECTORS
For all bulb & capillary switches

Option  Replacement Number  Description
Brass
W027  SD6213-27  1/2" NPT w/ 3/4" bushing
W045  SD6213-45  3/4" NPT
W051  SD6213-51  1/2" NPT
304 Stainless Steel
W028  SD6213-28  1/2" NPT w/ 3/4" bushing
W046  SD6213-46  3/4" NPT
W050  SD6213-50  1/2" NPT

THERMOWELLS
For all bulb & capillary switches

Brass
W075  SD6225-75  3/4" bushing adapter, 4" BT
W191  SD6225-191  1/2" NPT, 4" BT
W118  SD6225-118  3/4" bushing adapter, 7" BT
W192  SD6225-192  1/2" NPT, 7" BT
316 Stainless Steel
W076  SD6225-76  3/4" NPT, 4.5" BT
W193  SD6225-193  1/2" NPT, 4.5" BT
W119  SD6225-119  3/4" NPT, 7.5" BT
W177  SD6225-177  1/2" NPT, 7.5" BT
For all Immersion stem switches
W141  SD6225-141  1/2" NPT x 1 9/16" BT, brass
W146  SD6225-146  1/2" NPT x 1 9/16" BT, 316 stainless steel

OPTIONAL LENGTHS:
Optional immersion stem lengths to 15" may be available in brass, with or without 316 st/st thermowell. Consult UE for availability.
Optional capillary length to *50' may be available in copper or 304 st/st. Consult UE for availability.
Armor or Teflon® capillary protection may be available to lengths less than or equal to capillary length. Consult UE for availability.
*Consult UE regarding repeatability and ambient effects on capillary lengths over 30'.
Viton® is a registered trademark of E.I. duPon Nemours and Company.
DIMENSIONAL DRAWINGS

Pressure Models

Type H54, J54 and J54A
Models 22 - 28, 16009

Type J54S, Models 22 - 28

Type J54AS, Models 22 - 28

J54S, Model 16008

Type H54S,
Models 22 - 28
Type H54, J54, and J54A
Models 126-164

Type J54
Models 610 - 614

Type J54S
Models 610 - 614
DIMENSIONAL DRAWINGS

Temperature Models
Types B54, C54

Type C54A

Types B54, C54, C54A

All dimensions stated in inches (millimeters)
Types E54 and F54

Type F54S

Type E54S

<table>
<thead>
<tr>
<th>Bulb Size</th>
<th>Models</th>
<th>Inches</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>E54 &amp; F54</td>
<td>D20BC, D20BS, D22BC, D22BS</td>
<td>4.50</td>
<td>114.3</td>
</tr>
<tr>
<td></td>
<td>D21BC, D21BS</td>
<td>6.86</td>
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<td>E54S &amp; F54S</td>
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RECOMMENDED PRACTICES AND WARNINGS

United Electric Controls Company recommends careful consideration of the following factors when specifying and installing UE pressure and temperature units. Before installing a unit, the Installation and Maintenance instructions provided with unit must be read and understood.

- To avoid damaging unit, proof pressure and maximum temperature limits stated in literature and on nameplates must never be exceeded, even by surges in the system. Operation of the unit up to maximum pressure or temperature is acceptable on a limited basis (e.g., start-up, testing) but continuous operation must be restricted to the designated adjustable range. Excessive cycling at maximum pressure or temperature limits could reduce sensor life.
- A back-up unit is necessary for applications where damage to a primary unit could endanger life, limb or property. A high or low limit switch is necessary for applications where a dangerous runaway condition could result.
- The adjustable range must be selected so that incorrect, inadvertent or malicious setting at any range point cannot result in an unsafe system condition.
- Install unit where shock, vibration and ambient temperature fluctuations will not damage unit or affect operation. When applicable, orient unit so that moisture does not enter the enclosure via the electrical connection. When appropriate, this entry point should be sealed to prevent moisture entry.
- Unit must not be altered or modified after shipment. Consult UE if modification is necessary.
- Monitor operation to observe warning signs of possible damage to unit, such as drift in set point or faulty display. Check unit immediately.
- Preventative maintenance and periodic testing is necessary for critical applications where damage could endanger property or personnel.
- Electrical ratings stated in literature and on nameplate must not be exceeded. Overload on a switch can cause damage, even on the first cycle. Wire unit according to local and national electrical codes, using wire size recommended in installation sheet.
- Do not mount unit in ambient temp. exceeding published limits.

LIMITED WARRANTY

Seller warrants that the product hereby purchased is, upon delivery, free from defects in material and workmanship and that any such product which is found to be defective in such workmanship or material will be repaired or replaced by Seller (Ex-works, Factory, Watertown, Massachusetts. INCOTERMS); provided, however, that this warranty applies only to equipment found to be so defective within a period of 24 months from the date of manufacture by the Seller.

Seller shall not be obligated under this warranty for alleged defects which examination discloses are due to tampering, misuse, neglect, improper storage, and in any case where products are disassembled by anyone other than authorized Seller's representatives. EXCEPT FOR THE LIMITED WARRANTY OF REPAIR AND REPLACEMENT STATED ABOVE, SELLER DISCLAIMS ALL WARRANTIES WHATSOEVER WITH RESPECT TO THE PRODUCT, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

LIMITATION OF SELLER'S LIABILITY

Seller’s liability to Buyer for any loss or claim, including liability incurred in connection with (i) breach of any warranty whatsoever, expressed or implied, (ii) a breach of contract, (iii) a negligent act or acts (or negligent failure to act) committed by Seller, or (iv) an act for which strict liability will be imputed to seller, is limited to the “limited warranty” of repair and/or replacement as so stated in our warranty of product. In no event shall the Seller be liable for any special, indirect, consequential or other damages of a like general nature, including, without limitation, loss of profits or production, or loss or expenses of any nature incurred by the buyer or any third party.

UE specifications subject to change without notice.