

XTVR

Heating Cables

Self-regulating heating cable $\langle E_x \rangle$

PRODUCT OVERVIEW



| Traced surface type | Carbon steel Stainless steel Painted or unpainted metal | | | |
|--|---|--|--|--|
| Chemical resistance | Organics and corrosives For aggressive organics and corrosives consult your local nVent representative | | | |
| Supply Voltage | | | | |
| 230 Vac (contact nVent for data on the other voltages 190 - 277 Vac) | | | | |
| PRODUCT SPECIFICATIONS | | | | |

| Product dimensions (mm) | | | |
|--------------------------------|------------|--|--|
| Width x Thickness (nominal) mm | 10.8 x 7.2 | | |
| Weight (nominal) | 164 g/m | | |

RAYCHEM-DS-EU2174-XTVR-EN-2401

Technical details

| Maximum continuous operating temperature (energized) | 150°C |
|--|--|
| Maximum intermittent exposure temperature (energized/de-energized) | 250°C Maximum cumulative exposure 2000 hours |
| Minimum installation temperature | -60°C |
| Minimum bend radius | $-60^{\circ}C \le T < -20^{\circ}C: 51 \text{ mm}$ $-20^{\circ}C \le T < -10^{\circ}C: 35 \text{ mm}$ $-10^{\circ}C \le T < 0^{\circ}C: 25 \text{ mm}$ $0^{\circ}C \le T <+10^{\circ}C: 20 \text{ mm}$ $T \ge +10^{\circ}C: 12 \text{ mm}$ |
| Design life | 30 years or more depending on appliation (contact nVent for more details) |
| Power retention | Minimum 95% after 10 years of maximum operating temperature of 150°C |

Thermal output rating

Nominal power output at 230 Vac on insulated steel pipes

| Part Description | "Nominal power output (W/m at 10°C)" | See chart |
|---------------------|--|--------------|
| 20XTVR2-CT | 64 | А |
| 15XTVR2-CT | 48 | В |
| 12XTVR2-CT | 38 | С |
| 10XTVR2-CT | 32 | D |
| 8XTVR2-CT | 25 | E |
| 5XTVR2-CT | 16 | F |
| 3XTVR2-CT | 9 | G |



Maximum circuit length based on type 'C' circuit breakers according to EN 60898

| | | Electrical protection sizing / Maximum heating cable length per circuit (m) | | | | |
|------------|----------------|---|------|------|------|------|
| | Start-up Temp. | 16 A | 20 A | 25 A | 32 A | 40 A |
| 3XTVR2-CT | 10°C | 193 | 241 | 290 | 290 | 290 |
| | 0°C | 182 | 228 | 285 | 290 | 290 |
| | -20 | 165 | 206 | 258 | 290 | 290 |
| | -40 | 151 | 188 | 235 | 290 | 290 |
| 5XTVR2-CT | 10 | 144 | 180 | 221 | 221 | 221 |
| | 0 | 136 | 170 | 213 | 221 | 221 |
| | -20 | 123 | 154 | 192 | 221 | 221 |
| | -40 | 112 | 140 | 175 | 221 | 221 |
| 8XTVR2-CT | 10 | 104 | 130 | 162 | 171 | 171 |
| | 0 | 99 | 123 | 154 | 171 | 171 |
| | -20 | 89 | 112 | 140 | 171 | 171 |
| | -40 | 82 | 102 | 128 | 164 | 171 |
| 10XTVR2-CT | 10 | 89 | 111 | 139 | 151 | 151 |
| | 0 | 84 | 105 | 131 | 151 | 151 |
| | -20 | 76 | 95 | 119 | 151 | 151 |
| | -40 | 69 | 87 | 108 | 139 | 151 |
| 12XTVR2-CT | 10 | 77 | 96 | 120 | 135 | 135 |
| | 0 | 73 | 91 | 113 | 135 | 135 |
| | -20 | 66 | 82 | 103 | 131 | 135 |
| | -40 | 60 | 75 | 94 | 120 | 135 |

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| | | Electrical protection sizing / Maximum heating cable length per circuit (m) | | | | |
|------------|----------------|---|------|------|------|------|
| | Start-up Temp. | 16 A | 20 A | 25 A | 32 A | 40 A |
| 15XTVR2-CT | 10 | 57 | 72 | 90 | 115 | 120 |
| | 0 | 54 | 68 | 85 | 109 | 120 |
| | -20 | 49 | 62 | 77 | 99 | 120 |
| | -40 | 45 | 56 | 70 | 90 | 113 |
| 20XTVR2-CT | 10 | 45 | 57 | 71 | 91 | 101 |
| | 0 | 43 | 54 | 67 | 86 | 96 |
| | -20 | 39 | 49 | 61 | 78 | 88 |
| | -40 | 36 | 45 | 56 | 72 | 83 |

The above numbers are for circuit length estimation only. For more detailed information please use the nVent TraceCalc software or Contact your local nVent representative. nVent requires the use of a 30 mA residual current device to provide maximum safety and protection from fire. Where design results in higher leakage current, the preferred trip level for adjustable devices is 30 mA above any inherent capacitive leakage characteristic of the heater as specified by the trace heater supplier or alternatively, the next common available trip level for non adjustable devices, with a maximum of 300 mA. All safety aspects need to be proven.

APPROVALS

For use in ordinary and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust)

Temperature classification

T3: unconditional (20XTVR2-CT up to Max 240 VAC)

T6 ...T4: nVent RAYCHEM XTVR is approved for the listed temperature classifications by using the principles of stabilized design or controlled limited design. Use TraceCalc design software or contact nVent.

Product certification



More details about product certification, approvals and conditions of safe use are available in the installation manual for Self-regulating and Power limiting heating cable systems at www.nVent.com/RAYCHEM

ORDERING INFORMATION

| Part No. | Description | Part No. | Description |
|------------|----------------|------------|----------------|
| 2000003070 | XTV-3XTVR2-CT | 2000003076 | XTV-12XTVR2-CT |
| 2000003072 | XTV-5XTVR2-CT | 2000003078 | XTV-15XTVR2-CT |
| 2000003073 | XTV-8XTVR2-CT | 2000003080 | XTV-20XTVR2-CT |
| 2000003075 | XTV-10XTVR2-CT | | |

Components

nVent offers a full range of components for power connections, splices and end seals.

These components must be used to ensure proper functioning of the product and compliance with electrical requirements.

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