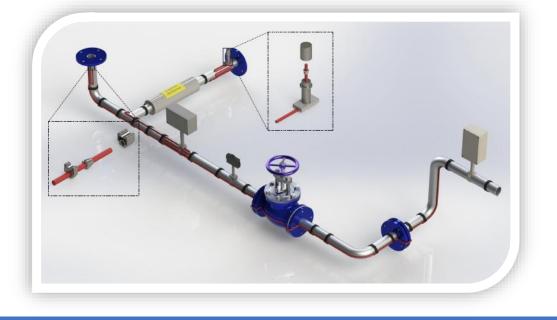


## **DKC EHT- Self Regulating Heat Trace**

DKC EHT self-regulating heating cables are engineered to offer freeze protection or maintain process temperature for both metallic and nonmetallic pipes, tanks, and other equipment. These cables adjust their heat output according to the surrounding environment along their entire length. As the ambient temperature decreases, leading to higher heat loss from the insulated pipe, tank, or equipment, the cable's heat output increases. Conversely, if the heat loss diminishes due to rising ambient temperatures or fluid movement, the cable lowers its heat output. All DKC Electrical Heat Trace & Accessories come standard with a two-year factory warranty.





#### **D** Creates Solutions

#### **Available Size & Accessories**



- •TRCR Warning Label Caution Labels
- •TRCR PTBO Junction Power Kit
- •TRCR Splice Inline Splice Kit
- •TRCR Tee Splice 3 Way Inline Splice Kit

•TRCR-03 – Fiberglass Installation Tape (20m Length/Roll)

•TRCR Heating Cable – Self Regulating Heat Trace

•TRCR BCLAMP-S – Stainless pipe clamp

•TRCR End Seal – End Kit (Includes Grommet & Seals)

•TRCR L-ES – Illuminated End Kit (Includes Grommet & Seals)

•TRCR-CA-P – Insulation Kit (Includes Grommet & Label)

- •TRCR Low Temp (65°C- 85°C) 120-240Vac 3W/ft, 5W/ft, 8W/ft, 10W/ft 12W/ft & 15W/ft
- •**TPCR- Medium Temp** (110°C- 135°C) 120-240Vac

5W/ft, 10 W/ft, 15 W/ft & 20W/ft

- •TSCR High Temp (150°C- 200°C) 120-240Vac
- 5W/ft, 10 W/ft, 15 W/ft, 20W/ft & 30W/ft
- •TUCR Ultra High Temp (210°C- 260°C) 120-240Vac

5W/ft, 10 W/ft, 15 W/ft, 20W/ft & 30W/ft



Brand	Low Temp	Medium Temp	High Temp	Ultra High Temp
DK-Lok Canada	TRCR	TPCR	TSCR	TUCR
	(65C, 85C)	(110C, 135C)	(15OC, 200C)	(210C, 260C)
Thermon	BSX	KSX	HTSX	VSX
	(65C, 85C)	(121C, 121C)	(150C, 250C)	(200C, 250C)
Raychem	BTV	QTVR	KTV	HTV
	(65C, 85C)	(110C, 110C)	(150C, 250C)	(205C, 260C)
Chromalox	HSRL	SRP	SRME	N/A
	(65C, 85C)	(110C,135C)	(150C, 215C)	

Equivalent cCSAus Classifications:

Ordinary Locations:

CLASS 2872 01- HEATERS-Cable and Cable Sets

CLASS 2872 81- HEATERS-Cable and Cable Sets- Certified to US Standards

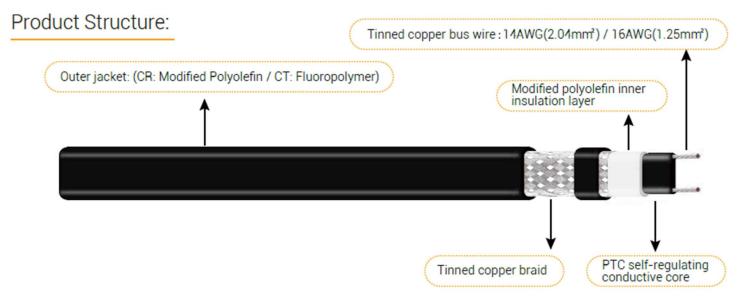
Hazardous Locations:

CLASS 2878 01 –HEATERS-Cable and Cable Sets- For Hazardous Locations

CLASS 2878 81 – HEATERS-Cable and Cable Sets- For Hazardous Locations- Certified to US Standards

# TRCR – Low Temperature Self Regulating Heat **Overview:**

DCK EHT TRCR - low temperature self-regulating heating cable can be used for freeze protection application without steam purge in civil & commercial or industrial applications, as well as to maintain process temperature. The maximum maintained temperature will be up to 65C. No matter whether the pipeline is overhead or buried installation, TRCR heating cable can maintain the temperature and phase structure of the medium in the pipeline or vessel. TRCR heating cable is certified by NEPSI (China), EAC(Russia) and IECEx, TEX, FM & cCSAu for hazardous applications as well as to be used in the area which is defined according relative



The extruded core tape, which made by parallel tinner copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of modified polyolefin is added to tinned copper braid and the outer jacket form a complete structure of TRCR heating cable, in which the outer jacket can be made of modified polyolefin material (CR) or fluoropolymer material (CT) according to different application or area.

## **Product Features:**

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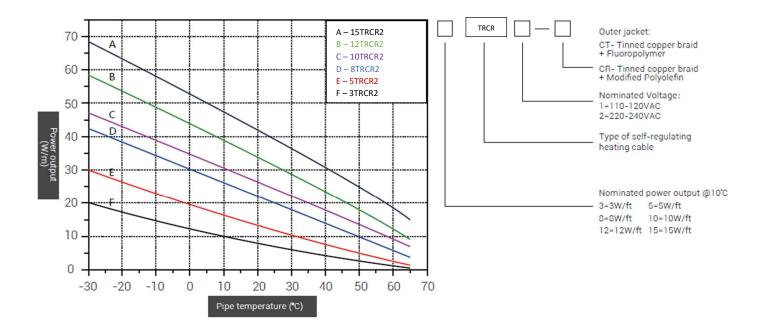
• According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; Simultaneously this feature can increase the efficiency of the heat tracing system and reduce energy consumption.

• Ability to be cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.

• It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product



Nominated Voltage:	110-120V(TRCR1) / 220-240V(TRCR2)					
Maximum maintaince temperature:	+65°C (150°F)					
Maximum intermittent exposure temperature:	+85°C (185°F)					
Temperature classification:	Т5/Т6					
IP level:	IP66/67					
Minimum installation temperature:	-60°C(-76°F)					
Minimum bending radius:	30mm					
Nominated power output @10°C:	3W/ft, 5W/ft, 8W/ft, 10W/ft, 12W/ft, 15W/ft,					
Dimension:	CR: 15.4mm(W)x7mm (T) / CT: 14.8mm(W)x6.4mm(T) (Only for 15TRCR) CR: 12.56mm(W)x5.96mm(T) / CT: 11.96mm(W)x5.36mm(T) (For other type except 15TRCR)					
Approvals mark:						



	Start-up		Max C	Circuit Length Vs	Breaker Size (ft)		
CB size(A) temperature °C (°F)	3TRCR1	5TRCR1	8TRCR1	10TRCR1	12TRCR1	15TRCR1	
10 (50) 0 (32) 16 -10 (14) -20 (-4)	342	277	185	145	102	84	
	0 (32)	342	253	163	132	93	76
	-10 (14)	282	228	145	121	85	70
	-20 (-4)	265	192	116	111	79	64
ſ	-40 (-40)	224	147	103	97	68	56
	10 (50)	342	277	202	182	128	105
	0 (32)	342	277	185	165	116	95
20	-10 (14)	342	260	163	151	107	87
	-20 (-4)	317	241	149	139	99	80
	-40 (-40)	282	211	130	121	86	70
	10 (50)	342	277	205	197	160	131
[	0 (32)	342	277	205	197	146	119
25	-10 (14)	342	277	205	189	133	109
[	-20 (-4)	342	277	205	174	123	101
	-40 (-40)	342	277	192	151	107	87
	10 (50)	342	277	205	197	175	167
[	0 (32)	342	277	205	197	175	152
32	-10 (14)	342	277	205	197	171	139
[	-20 (-4)	342	277	205	197	158	129
	-40 (-40)	342	277	205	193	137	111
	10 (50)	342	277	205	197	175	171
[	0 (32)	342	277	205	197	175	171
40	-10 (14)	342	277	205	197	175	171
	-20 (-4)	342	277	205	197	175	161
[	-40 (-40)	342	277	205	197	171	139



00.000	Start-up temperature		Max	Circuit Length Vs	Breaker Size (ft)		
CB size(A) temperature *C (*F)	3TRCR2	5TRCR2	8TRCR2	10TRCR2	12TRCR2	15TRCR2	
	10 (50)	685	555	370	291	205	167
	0 (32)	685	507	325	264	186	152
16	-10 (14)	565	455	291	242	171	139
	-20 (-4)	531	383	233	223	158	129
F	-10 (-10)	448	294	205	193	137	111
	10 (50)	685	555	404	363	256	209
	0 (32)	685	555	370	330	233	190
20	-10 (14)	685	520	325	302	214	174
	-20 (-4)	633	483	298	278	197	161
	-40 (-40)	565	421	260	242	171	139
	10 (50)	685	555	411	394	320	261
Г	0 (32)	685	555	411	394	291	238
25	-10 (14)	685	555	411	377	267	218
	-20 (-4)	685	555	411	348	247	201
	-40 (-40)	647	555	383	302	214	174
	10 (50)	685	555	411	394	349	334
	0 (32)	685	555	411	394	349	304
32	-10 (14)	685	555	411	394	342	278
	-20 (-4)	685	555	411	394	316	257
	-40 (-40)	685	555	411	387	274	223
	10 (50)	685	555	411	394	349	342
	0 (32)	685	555	411	394	349	342
40	-10 (14)	685	555	411	394	349	342
	-20 (-4)	685	555	411	394	349	322
	-40 (-40)	685	555	411	394	342	279

#### Description:

1. The maximum circuit length shown is in accordance with IEC 60898, with Type C circuit breakers as standard, at reference start-up temperature and 10 C Experimental data obtained from instantaneous trip current characteristics under maintenance temperature conditions. For the maximum loop length corresponding to other trip current characteristics or other types of circuit breakers, please contact the technical representative of DK-Lok Canada Ltd.

2. Although the heat tracing system is generally used to maintain the medium in the pipe or vessel at the required temperature level, the self-regulating heat tracing cable may be at a lower temperature level when it is energized. For design data when the starting temperature is lower than the above temperature, please contact the technical representative of DK-Lok Canada Ltd.

## TPCR – Mid Temperature Self Regulating Heat **Overview:**

DKC EHT - Middle temperature self-regulating heating cable can be used for freeze protection application and process temperature maintained within/out steam purge (or the steam purge temperature will be lower than 135 C) in industry area. The maximum maintained temperature will be up to 110 C. No matter whether the pipeline is overhead or buried installation, TPCR heating cable can maintain the temperature and phase structure of the medium in the pipeline or vessel. TPCR heating cable is certified by NEPSI (China), EAC(Russia), IECEx, ATEX & cCSAu for hazardous application, as well as to be used in the area which is defined according relative standard.

#### Product Structure:

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The extruded core tape, which made by parallel tinner copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of fluoropolymer are added to tinned copper braid and the outer jacket form a complete structure of TPCR heating cable, in which the outer jacket can be made of fluoropolymer material (CT).

## **Product Features:**

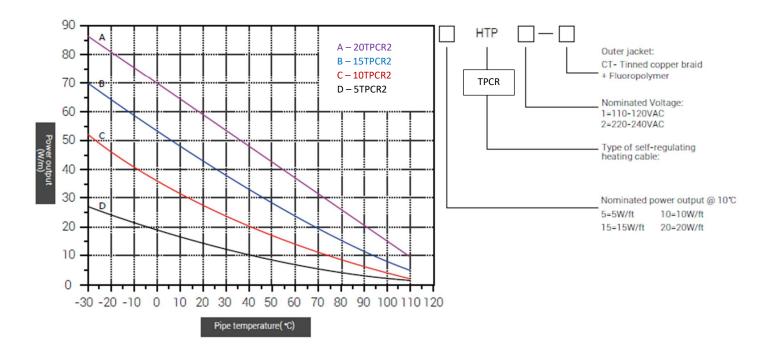
• According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; Simultaneously this feature can increase the efficiency of the heat tracing system and reduce energy consumption.

• Ability to be cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.

• It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product



Nominated Voltage:	110-120V(TPCR1) / 220-240V(TPCR2)
Maximum maintaince temperature:	+110°C (225°C)
Maximum intermittent exposure temperature:	+135°C (275°F)
Temperature classification:	T4
IP level:	IP66/67
Minimum installation temperature:	-60°C (-76°F)
Minimum bending radius:	30mm
Nominated power output @10°C:	5W/ft, 10W/ft, 15W/ft, 20W/ft
Dimension:	CT: 12.36mm(W)×4.76mm(T)
Approvals mark:	



0D aim (A)	Start-up		Max Circuit Length V	's Breaker Size (ft)	
CB size(A)	temperature *C (*F)	5TPCR1	10TPCR1	15TPCR1	20TPCR1
	10 (50)	214	157	105	73
F	0 (32)	199	147	99	66
16	-10 (14)	183	134	90	61
	-20 (-4)	169	124	84	56
	-40 (-40)	146	108	72	19
	10 (50)	253	196	132	91
	0 (32)	249	184	124	83
20	-10 (14)	228	168	113	76
	-20 (-4)	211	155	104	70
	-40 (-40)	183	135	90	61
	10 (50)	286	202	163	128
	0 (32)	286	202	154	117
25	-10 (14)	286	202	141	107
	-20 (-4)	286	194	131	99
	-40 (-40)	265	168	113	86
	10 (50)	286	202	163	143
	0 (32)	286	202	163	130
32	-10 (14)	286	202	163	119
	-20 (-4)	286	202	163	110
	-40 (-40)	286	202	145	95
	10 (50)	286	202	163	145
	0 (32)	286	202	163	145
40	-10 (14)	286	202	163	145
	-20 (-4)	286	202	163	140
	-40 (-40)	286	202	163	122

0.0	Start-up	Max Circuit Length Vs Breaker Size (ft)					
CB size(A)	temperature °C (°F)	5TPCR2	10TPCR2	15TPCR2	20TPCR2		
	10 (50)	428	314	211	146		
	0 (32)	398	294	198	133		
16	-10 (14)	365	269	181	122		
	-20 (-4)	337	248	167	112		
	-40 (-40)	292	215	145	97		
	10 (50)	507	393	263	183		
	0 (32)	498	367	247	166		
20	-10 (14)	456	336	226	152		
	-20 (-4)	421	310	209	140		
	-40 (-40)	365	269	181	122		
	10 (50)	572	404	325	257		
	0 (32)	572	404	309	233		
25	-10 (14)	572	404	283	214		
	-20 (-4)	572	387	261	198		
	-10 (-10)	531	336	226	171		
	10 (50)	572	404	325	285		
	0 (32)	572	404	325	259		
32	-10 (14)	572	404	325	238		
	-20 (-4)	572	101	325	219		
	-10 (-10)	572	101	290	190		
	10 (50)	572	404	325	291		
	0 (32)	572	404	325	291		
40	-10 (14)	572	404	325	291		
	-20 (-4)	572	404	325	281		
	-40 (-40)	572	101	325	243		

#### Description:

1. The maximum circuit length shown is in accordance with IEC 60898, with Type C circuit breakers as standard, at reference start-up temperature and 10 C Experimental data obtained from instantaneous trip current characteristics under maintenance temperature conditions. For the maximum loop length corresponding to other trip current characteristics or other types of circuit breakers, please contact the technical representative of DK-Lok Canada Ltd.

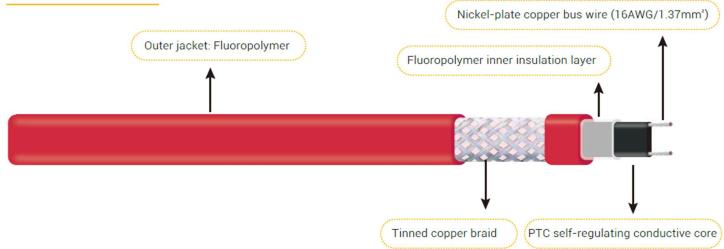
2. Although the heat tracing system is generally used to maintain the medium in the pipe or vessel at the required temperature level, the self-regulating heat tracing cable may be at a lower temperature level when it is energized. For design data when the starting temperature is lower than the above temperature, please contact the technical representative of DK-Lok Canada Ltd.

# TSCR – High Temperature Self Regulating Heat Trace **Overview:**

DKC EHT - High temperature self-regulating heating cable can be used for freeze protection application and process temperature maintained within/out steam purge (or the steam purge temperature will be lower than 200C) in industry area. The maximum maintained temperature will be up to 150 C. No matter whether the pipeline is overhead or buried installation, TSCR heating cable can maintain the temperature and phase structure of the medium in the pipeline or vessel. TSCR heating cable is certified by NEPSI (China), EAC(Russia), IECEx, ATEX & cCSAu for hazardous application, as well as to be used in the area which is defined according relative standard.

#### Product Structure:

**D** Creates Solutions



The extruded core tape, which made by parallel nickel-plate copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of fluoropolymer are added to tinned copper braid and the outer jacket form a complete structure of TSCR heating cable, in which the outer jacket can be made of fluoropolymer material (CT).

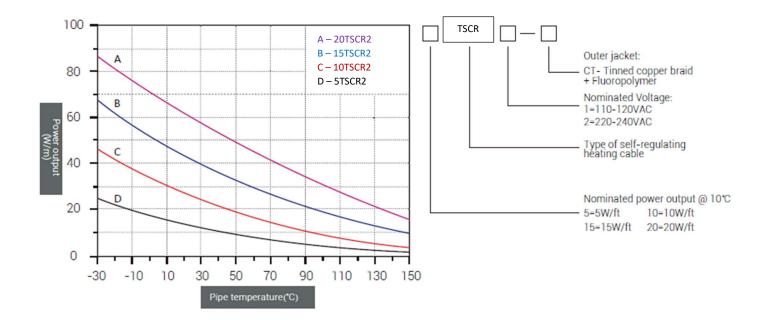
## **Product Features:**

• According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; Simultaneously this feature can increase the efficiency of the heat tracing system and reduce energy consumption.

• Ability to be cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.

• It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product

Nominated Voltage:	110-120V(TSCR1) / 220-240V(TSCR2)				
Maximum maintaince temperature:	+150°C (302°F)				
Maximum continuous exposure temperature:	+200°C (392°F)				
Temperature classification:	Т3				
IP level:	IP66/67				
Minimum installation temperature:	-60°C (-76°F)				
Minimum bending radius:	30mm				
Nominated power output @10°C:	5W/ft, 10W/ft, 15W/ft, 20W/ft				
Dimension:	CT: 12.4mm (W) ×4.8mm (T)				
Approvals mark:					



0.0	Start-up	Ma	ax Circuit Length	Vs Breaker Size	(ft)
CB size(A)	temperature °C (°F)	5TSCR1	10TSCR1	15TSCR1	20TSCR1
	10 (50)	219	134	111	103
	0 (32)	208	134	111	99
16	-10 (14)	191	111	111	87
	-20 (-4)	177	101	110	77
	-40 (-40)	154	77	103	68
	10 (50)	264	134	111	103
	0 (32)	259	134	111	103
20	-10 (14)	238	134	111	103
	-20 (-4)	220	134	111	103
	-40 (-40)	191	134	106	92
	10 (50)	294	134	111	103
	0 (32)	288	134	111	103
25	-10 (14)	267	134	111	103
	-20 (-4)	255	134	111	103
	-40 (-40)	236	134	111	103
	10 (50)	305	134	111	103
	0 (32)	305	134	111	103
32	-10 (14)	305	134	111	103
	-20 (-4)	305	134	111	103
	-40 (-40)	305	134	111	103
	10 (50)	305	134	111	103
	0 (32)	305	134	111	103
40	-10 (14)	305	134	111	103
	-20 (-4)	305	134	111	103
	-40 (-40)	305	134	111	103

	Start-up	М	ax Circuit Length	n Vs Breaker Size	e (ft)
CB size(A)	temperature *C (*F)	5TSCR2	10TSCR2	15TSCR2	20TSCR2
	10 (50)	438	294	211	157
	0 (32)	417	264	208	153
16	-10 (14)	383	240	190	142
	-20 (-4)	354	209	176	133
	-40 (-40)	308	178	152	118
	10 (50)	527	366	263	196
	0 (32)	518	339	260	191
20	-10 (14)	476	308	238	178
	-20 (-4)	440	281	220	166
	-40 (-40)	383	229	191	147
	10 (50)	589	421	346	245
	0 (32)	575	407	325	238
25	-10 (14)	534	380	297	222
	-20 (-4)	510	325	275	208
	-40 (-40)	472	283	238	184
	10 (50)	609	421	346	308
	0 (32)	609	421	346	305
32	-10 (14)	609	421	346	284
	-20 (-4)	609	401	325	266
	-40 (-40)	609	370	305	235
	10 (50)	609	421	346	308
	0 (32)	609	421	346	308
10	-10 (14)	609	421	346	308
	-20 (-1)	609	421	346	308
	-40 (-40)	609	421	346	294

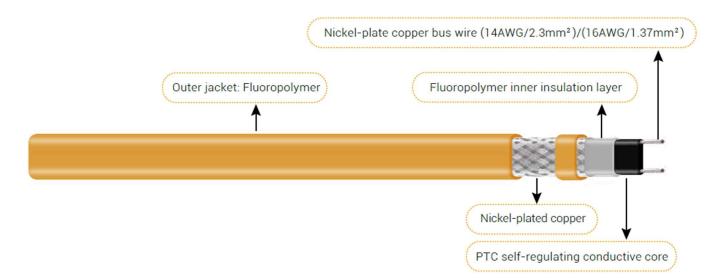
#### Description:

1. The maximum circuit length shown is in accordance with IEC 60898, with Type C circuit breakers as standard, at reference start-up temperature and 10 C Experimental data obtained from instantaneous trip current characteristics under maintenance temperature conditions. For the maximum loop length corresponding to other trip current characteristics or other types of circuit breakers, please contact the technical representative of DK-Lok Canada Ltd.

2. Although the heat tracing system is generally used to maintain the medium in the pipe or vessel at the required temperature level, the self-regulating heat tracing cable may be at a lower temperature level when it is energized. For design data when the starting temperature is lower than the above temperature, please contact the technical representative of DK-Lok Canada Ltd.

# TUCR – Ultra High Temperature Self Regulating Heat Trace Overview:

DKC EHT - Ultra-high temperature self-regulating heating cable can be used for ultra high continuous operation temperature (up to 210C), also focus on the freeze protection and process temperature-maintained application, TUCR heating cable can withstand the exposure temperature up to 260C, including intermittent or continuous high temperature steam purge. In another way TUCR heating cable can be installed at the minimum ambient temperature of -60 C, and there will be high-power output under high temperature condition. All of above are considered to ensure the completion of reaction or crystallization process in the production of petro-chemical products. TUCR heating cable is certified by IECEx, ATEX, NEPSI (China) and EAC (Russia), cCSAu (Canada & US) including hazardous application and ordinary safety area.



The extruded core tape, which made by parallel nickel-plate copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of fluoropolymer are added to the nickel-plated copper and the outer jacket form a complete structure of TUCR heating cable, in which the outer jacket can be made of fluoropolymer material (CT).

## **Product Features:**

• According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; Simultaneously this feature can increase the efficiency of the heat tracing system and reduce energy consumption.

• Ability to be cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.

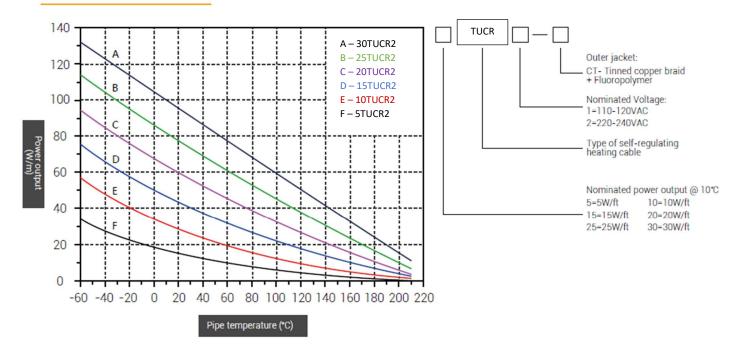
• It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product.

•Ultra-high operating temperature and withstand temperature, as well as high output power under high temperature conditions,

ensure that the economic benefits can be maximized in relevant application environments



Nominated Voltage:	110-120V(TUCR1) / 220-240V(TUCR2)				
Maximum maintaince temperature	+210°C (410°F)				
Maximum continuous exposure temperature:	+260°C (500°F)				
Temperature classification	Т2				
IP level:	IP66/67				
Minimum installation temperature:	-60 °C				
Minimum bending radius:	30mm				
Nominated power output @10°C:	5W/ft, 10W/ft, 15W/ft, 20W/ft, 25W/ft, 30W/ft				
Dimension:	CT: 12.4mm(W)×4.8mm(T)				
Approvals mark:					



	Start-up		Max	k Circuit Lengt	h Vs Breaker S	ize (ft)	
CB size(A)	temperature °C (°F)	5TUCR1	10TUCR1	15TUCR1	20TSUR1	25TUCR1	30TUCR1
	10 (50)	228	153	110	81	71	59
	0 (32)	217	137	108	79	67	56
16	-10 (14)	199	125	99	74	64	54
	-20 (-4)	184	109	92	69	61	51
	-40 (-40)	160	93	79	61	56	47
	10 (50)	274	191	137	102	88	74
	0 (32)	270	176	135	99	84	70
20	-10 (14)	248	160	124	92	80	67
	-20 (-4)	229	146	114	87	77	64
	-40 (-40)	199	119	99	77	71	59
	10 (50)	306	219	180	127	110	92
	0 (32)	299	212	169	124	105	88
25	-10 (14)	278	198	155	116	100	84
	-20 (-4)	265	169	143	108	96	80
	-40 (-40)	246	147	124	96	88	74
	10 (50)	317	219	180	160	141	118
	0 (32)	317	219	180	159	135	112
32	-10 (14)	317	219	180	148	129	107
	-20 (-4)	317	208	169	138	123	103
	-40 (-40)	317	192	159	122	113	95
	10 (50)	317	219	180	160	148	136
	0 (32)	317	219	180	160	148	136
40	-10 (14)	317	219	180	160	148	134
	-20 (-4)	317	219	180	160	148	129
	-40 (-40)	317	219	180	153	141	118

CB size(A)	Start-up temperature °C (°F)	Max Circuit Length Vs Breaker Size (ft)					
		5TUCR2	10TUCR2	15TUCR2	20TUCR2	25TUCR2	30TUCR2
16	10 (50)	456	306	219	163	141	118
	0 (32)	433	274	217	159	135	112
	-10 (14)	398	249	198	148	129	107
	-20 (-4)	368	217	183	138	123	95
	-40 (-40)	321	185	159	122	113	148
20	10 (50)	548	381	274	204	177	141
	0 (32)	539	353	271	198	169	134
	-10 (14)	495	321	248	185	161	129
	-20 (-4)	458	292	229	173	154	118
	-40 (-40)	398	239	198	153	141	184
25	10 (50)	613	438	360	254	221	176
	0 (32)	598	424	338	248	211	168
	-10 (14)	556	395	309	231	201	161
	-20 (-4)	531	338	286	216	192	148
	-40 (-40)	492	294	248	191	177	236
32	10 (50)	634	438	360	321	282	236
	0 (32)	634	438	360	318	270	225
	-10 (14)	634	438	360	296	257	215
	-20 (-4)	634	417	338	277	246	206
	-40 (-40)	634	385	317	245	226	189
40	10 (50)	634	438	360	321	297	272
	0 (32)	634	438	360	321	297	272
	-10 (14)	634	438	360	321	297	269
	-20 (-4)	634	438	360	321	297	257
	-40 (-40)	634	438	360	306	282	236

#### Description:

1. The maximum circuit length shown is in accordance with IEC 60898, with Type C circuit breakers as standard, at reference start-up temperature and 10 C Experimental data obtained from instantaneous trip current characteristics under maintenance temperature conditions. For the maximum loop length corresponding to other trip current characteristics or other types of circuit breakers, please contact the technical representative of DK-Lok Canada Ltd.

2. Although the heat tracing system is generally used to maintain the medium in the pipe or vessel at the required temperature level, the self-regulating heat tracing cable may be at a lower temperature level when it is energized. For design data when the starting temperature is lower than the above temperature, please contact the technical representative of DK-Lok Canada Ltd.