

GE Sensing

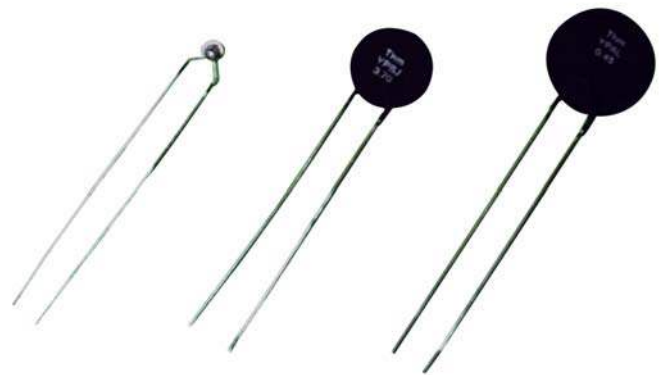
Features

- Designed for general purpose over-current, over-voltage and direct over-temperature protection
 - Wide range of operating current & voltage levels
 - Approved to CECC 44 001 - 002 (certificate E1254/F)
 - Excellent stability
 - Fail-safe operation
 - Solid state
 - High performance barium titanate ceramic
 - Suitable for automatic PCB insertion
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PTC Type YP

Thermometrics Wired Disc

PTC Type YP is a Thermometrics product. Thermometrics has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



Type YP Specifications

Description

A range of radially-wired PTC disc thermistors with black silicone resin coating.

Options

- Non-standard resistances and tolerances
- Resistance matching
- Non-standard wire lengths
- Other wire configurations

Packaging

All types in the YP range are available loose-packed, as shown in the drawing. Devices are also available on bandolier (tape & reel): types with diameter $a < 0.53$ in (13.5 mm) comply with IEC 286-2.

To identify the packaging required, replace X in the product codes shown overleaf as follows:

- **Bandoliered:** T
- **Loose-packed:** N

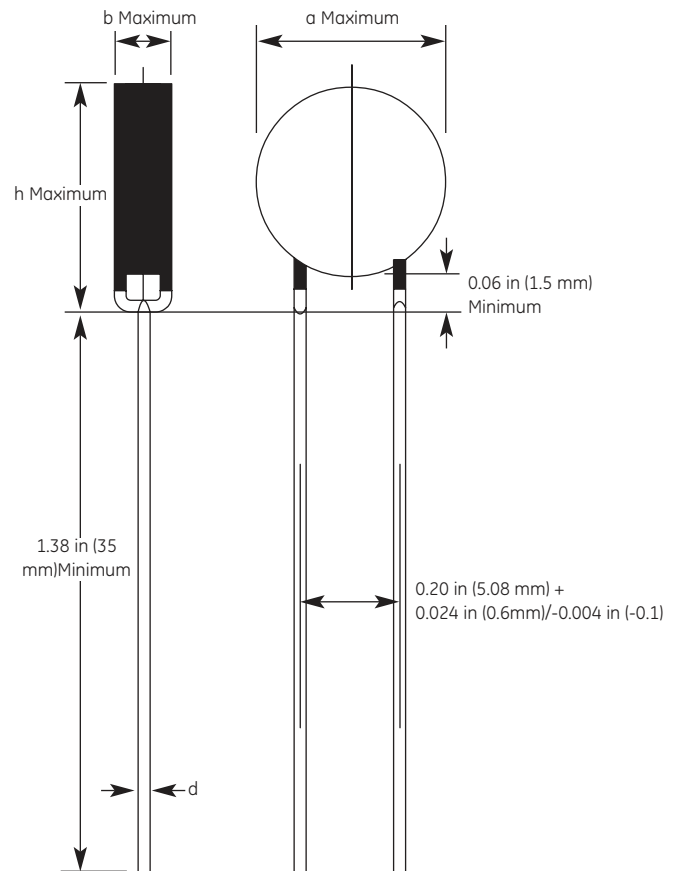
Devices are also available with dimension H_0 (as specified in IEC 286-2) of 0.71 in (18mm) instead of the standard 0.62 in (16 mm). These parts can be ordered by adding the suffix 18 to the code e.g. YPAL0.80T18.

Pack quantities:

- **Loose packed:** 500/box Bandoliered
- **$a < 0.53$ in (13.5 mm):** 1000/reel (0.5" pitch)
- **$a \geq 0.53$ in (13.5 mm):** 500/reel (1" pitch)

Data

- **Tolerance on R_{25} :** $\pm 25\%$
- **Ambient temperature range:**
 - **at maximum voltage:** 32°F to 140°F (0°C to 60°C)
 - **at zero voltage:** -13°F to 257°F (-25°C to 125°C)
 - **Lead wire material:** Solder-coated brass
 - **Body coating:** Silicone resin
(except types YPEL3500X & YPEL6250X)



NTC Type JW Dimensions

Type YP Specifications

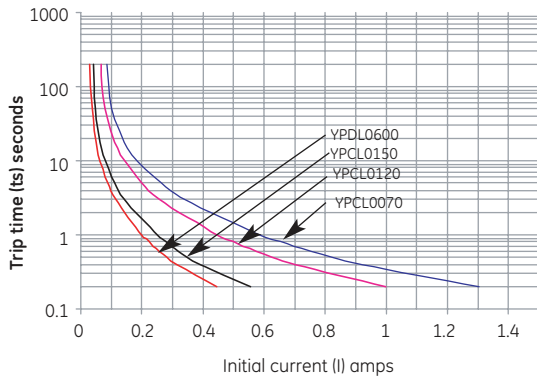
Group	Code	R_{25}	I_{nt}	I_t	I_{mo}	I_r	a	b	l	d	Brand code	CECC approval
		Ω	A	A	A	mA	mm	mm	mm	mm		
$V_{max} = 30$ VDC $T_b = 248^\circ\text{F}$ (120°C)	YPAL0.45X	0.45	1.3	2.6	8	115	17.5	3.5	21	0.6	ThM YPAL0.45	
	YPAL0.80X	0.8	0.85	1.7	5.5	80	13.5	3.5	17	0.6	ThM YPAL 0.80	
	YPAL1.20X	1.2	0.6	1.2	4.3	70	11	3.5	14.5	0.6	ThM YPAL 1.20	
	YPAL1.80X	1.8	0.45	0.9	3	60	9	3.5	12.5	0.6	ThM YPAL 1.80	
	YPAL4.60X	4.6	0.25	0.5	1	45	6.5	3.5	10	0.6	K	
	YPAL0013X	13	0.12	0.24	0.7	25	4	3.5	7.5	0.5	L	
$V_{max} = 80$ VDC $T_b = 176^\circ\text{F}$ (80°C)	YPBJ2.30X	2.3	0.245	0.5	8	40	17.5	3.5	21	0.6	ThM YPBJ 2.30	
	YPBJ3.70X	3.7	0.17	0.35	5.5	30	13.5	3.5	17	0.6	ThM YPBJ 3.70	
	YPBJ5.60X	5.6	0.13	0.265	4.3	25	11	3.5	14.5	0.6	ThM YPBJ 5.60	Yes
	YPBJ9.40X	9.4	0.09	0.19	3	20	9	3.5	12.5	0.6	ThM YPBJ 9.40	Yes
	YPBJ0025X	25	0.05	0.11	1	16	6.5	3.5	10	0.6	M	Yes
	YPBJ0055X	55	0.03	0.06	0.7	12	4	3.5	7.5	0.5	N	Yes
$V_{max} = 80$ VDC $T_b = 248^\circ\text{F}$ (120°C)	YPBL2.30X	2.3	0.45	0.9	8	40	17.5	3.5	21	0.6	ThM YPBL 2.30	
	YPBL3.70X	3.7	0.32	0.64	5.5	30	13.5	3.5	17	0.6	ThM YPBL 3.70	
	YPBL5.60X	5.6	0.25	0.5	4.3	25	11	3.5	14.5	0.6	ThM YPBL 5.60	Yes
	YPBL9.40X	9.4	0.15	0.3	3	20	9	3.5	12.5	0.6	ThM YPBL 9.40	Yes
	YPBL0025X	25	0.085	0.17	1	16	6.5	3.5	10	0.6	O	Yes
	YPBL0055X	55	0.05	0.1	0.7	12	4	3.5	7.5	0.5	P	Yes
$V_{max} = 265$ Vrms $T_b = 176^\circ\text{F}$ (80°C)	YPCJ0006X	6	0.17	0.35	4.1	10	17.5	5	21	0.6	ThM YPCJ 0006	
	YPCJ0010X	10	0.11	0.23	2.2	8	13.5	5	17	0.6	ThM YPCJ 0010	
	YPCJ0015X	15	0.09	0.18	1.5	6	11	5	14.5	0.6	ThM YPCJ 0015	Yes
	YPCJ0025X	25	0.06	0.13	1	5	9	5	12.5	0.6	ThM YPCJ 0025	Yes
	YPCJ0070X	70	0.03	0.07	0.4	4	6.5	5	10	0.6	Q	Yes
	YPCJ0150X	150	0.015	0.04	0.2	3	4	5	7.5	0.5	R	Yes
$V_{max} = 265$ Vrms $T_b = 248^\circ\text{F}$ (120°C)	YPCL0006X	6	0.33	0.66	4.1	15	17.5	5	21	0.6	ThM YPCL 0006	
	YPCL0010X	10	0.2	0.4	2.2	13	13.5	5	17	0.6	ThM YPCL 0010	
	YPCL0015X	15	0.14	0.28	1.5	10	11	5	14.5	0.6	ThM YPCL 0015	Yes
	YPCL0025X	25	0.1	0.2	1	9	9	5	12.5	0.6	ThM YPCL0025	Yes
	YPCL0035X	35	0.08	0.16	1	9	9	5	12.5	0.6	ThM YPCL 0035	Yes
	YPCL0045X	45	0.07	0.14	1	9	9	5	12.5	0.6	ThM YPCL 0045	Yes
	YPCL0055X	55	0.06	0.125	1	9	9	5	12.5	0.6	ThM YPCL 0055	Yes
	YPCL0065X	65	0.055	0.11	1	9	9	5	12.5	0.6	ThM YPCL 0065	Yes
	YPCL0070X	70	0.055	0.11	0.4	6	6.5	5	10	0.6	S	Yes
	YPCL0120X	120	0.035	0.07	0.4	5	6.5	5	10	0.6	Z	Yes
	YPCL0150X	150	0.03	0.06	0.2	5	4	5	7.5	0.5	T	Yes
$V_{max} = 420$ Vrms $T_b = 248^\circ\text{F}$ (120°C)	YDDL0600X	600	0.021	0.039	0.2	3	6.5	5	10	0.6	U	Yes
$V_{max} = 550$ Vrms $T_b = 248^\circ\text{F}$ (120°C)	YPEK1200X	1200	0.015	0.03	0.1	3	6.5	5	10	0.6	V	Yes
	YPEK1500X	1500	0.012	0.024	0.1	2	6.5	5	10	0.6	W	Yes
	YPEL3500X	3500	0.008	0.018	0.25	2.5	4	4	7.5	0.5	X	Yes
	YPEL6250X	6250	0.006	0.014	0.15	1.5	4	4	7.5	0.5	Y	Yes

V_{max}	Maximum operating voltage	I_t	Minimum trip current (77°F (25°C) ambient)
T_b	Switching temperature	I_{mo}	Maximum overload current
R_{25}	Resistance at 77°F (25°C)	I_r	Residual current (77°F (25°C) ambient)
I_{nt}	Maximum current without tripping (77°F (25°C) ambient)		

Type YP Specifications

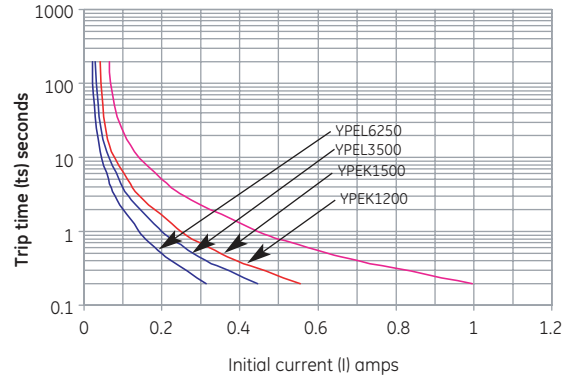
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPDL0600
YPCL0150
YPCL0120
YPCL0070



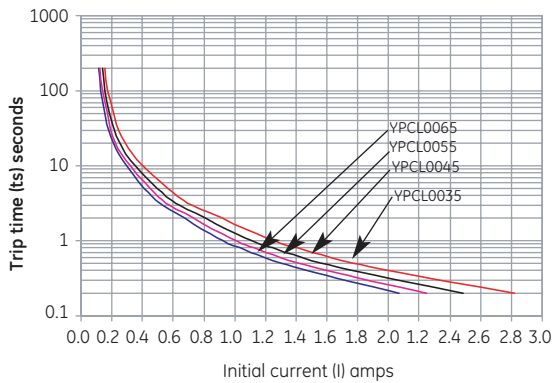
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPEL6250
YPEL3500
YPEK1500
YPEK1200



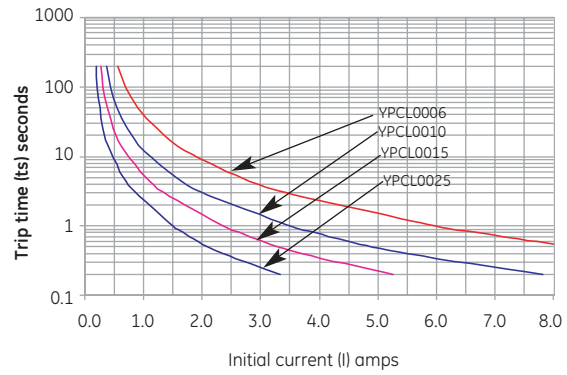
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPCL0065
YPCL0055
YPCL0045
YPCL0035



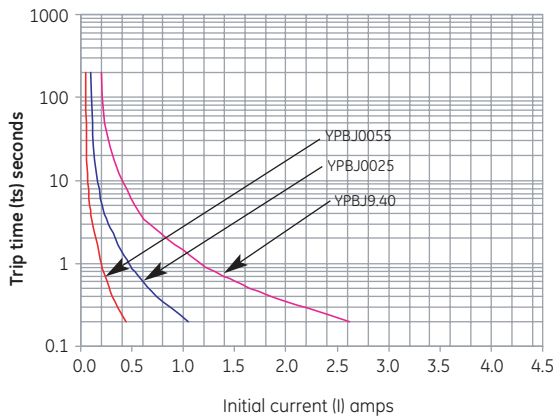
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPCL0006
YPCL0010
YPCL0015
YPCL0025



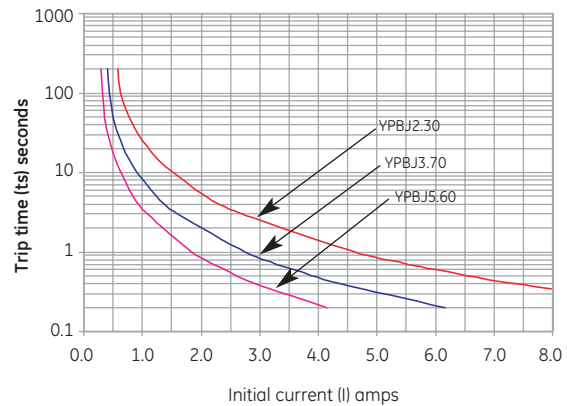
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPBJ0055
YPBJ0025
YPBJ9.40



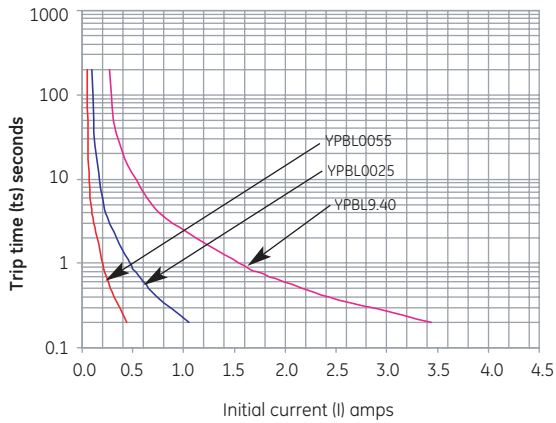
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPBJ2.30
YPBJ3.70
YPBJ5.60

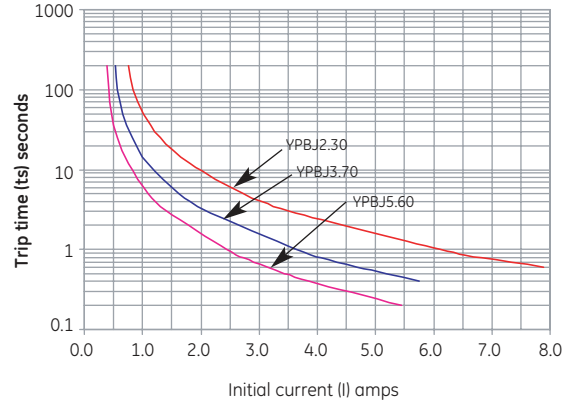


Type YP Specifications

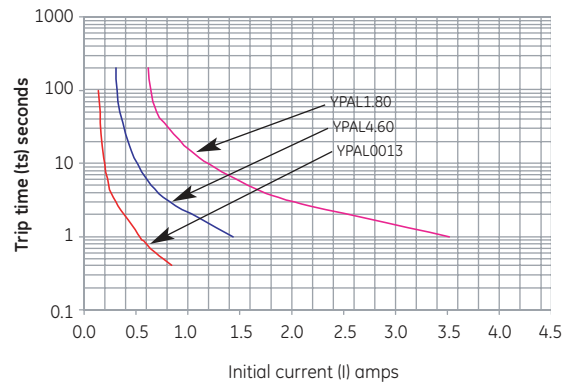
YP types: Tripping time v Initial current
Ta=25°C, stillair.
YPBL0055
YPBL0025
YPBL9.40



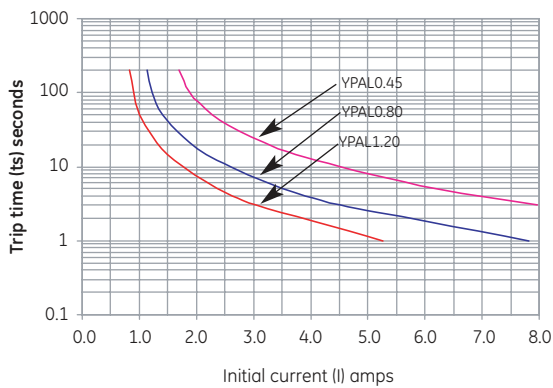
YP types: Tripping time v Initial current
Ta=25°C, stillair.
YPBJ2.30
YPBJ3.70
YPBJ5.60



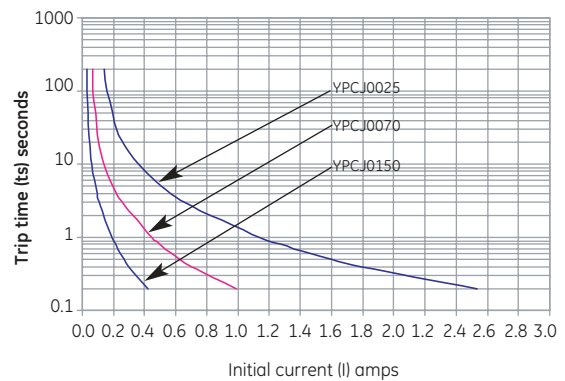
YP types: Tripping time v Initial current
Ta=25°C, stillair.
YPAL1.80
YPAL4.60
YPAL0013



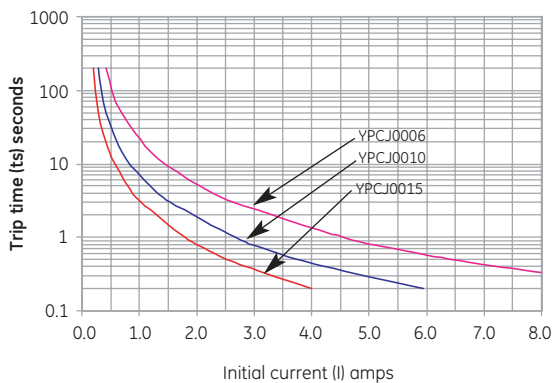
YP types: Tripping time v Initial current
Ta=25°C, stillair.
YPAL0.45
YPAL0.80
YPAL1.20



YP types: Tripping time v Initial current
Ta=25°C, stillair.
YPCJ0025
YPCJ0070
YPCJ0150



YP types: Tripping time v Initial current
Ta=25°C, stillair.
YPCJ0006
YPCJ0010
YPCJ0015



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