

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number:	YPAL1.80N
Manufacturer:	Amphenol Thermometrics
Package:	Radial, Disc
Availability:	Please confirm with sales

Product Page:

<https://antrexco.com/product/details/amphenol-thermometrics/ypal1-80n.html>

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Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

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
-

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°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°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°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} = 265Vrms T _b = 176°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} = 265Vrms T _b = 248°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} = 420Vrms T _b = 248°F (120°C)	YDDL0600X	600	0.021	0.039	0.2	3	6.5	5	10	0.6	U	Yes
V _{max} = 550Vrms T _b = 248°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.

YPLD0600
YPLC0150
YPLC0120
YPLC0070



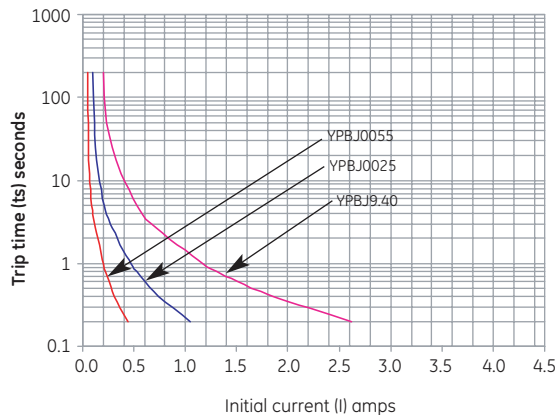
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPLC0065
YPLC0055
YPLC0045
YPLC0035



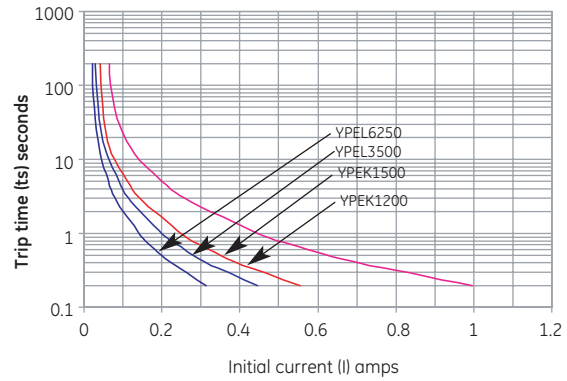
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPB0055
YPB0025
YPB09.40



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

YPEL6250
YPEL3500
YPEK1500
YPEK1200



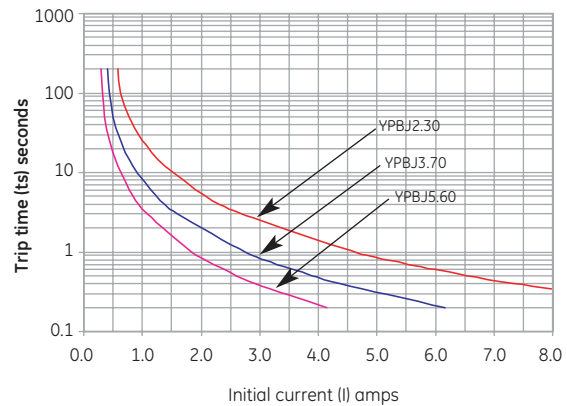
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPLC0006
YPLC0010
YPLC0015
YPLC0025



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

YPB02.30
YPB03.70
YPB05.60



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.

YPAL0.45
YPAL0.80
YPAL1.20



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

YPCJ0006
YPCJ0010
YPCJ0015



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

YPBJ2.30
YPBJ3.70
YPBJ5.60



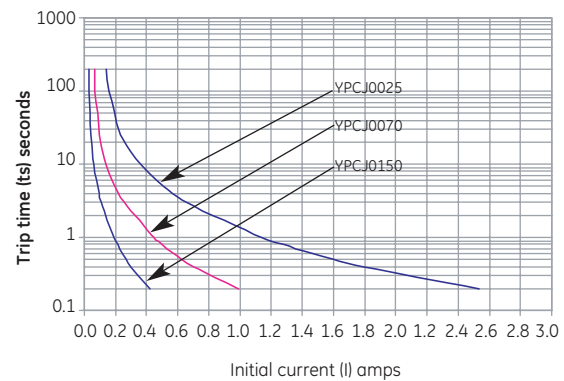
YP types: Tripping time v Initial current
Ta=25°C, stillair.

YPAL1.80
YPAL4.60
YPAL0013



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

YPCJ0025
YPCJ0070
YPCJ0150



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