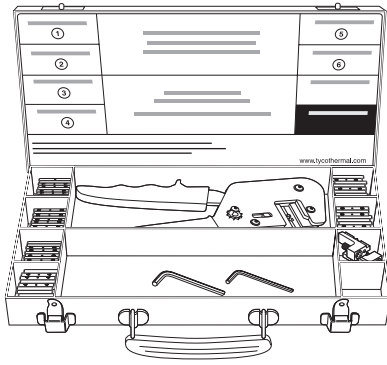
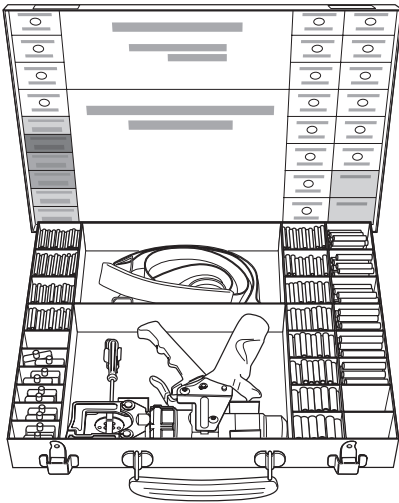


Special tools:



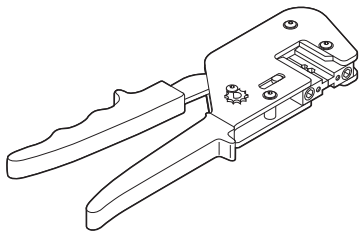
PI-TOOL-SET-01

Metal toolbox containing a mechanical crimp tool, crimping dies and the crimps required for the connection of PI heating cables and cold leads in conjunction with the connection/splice kit type CS-150-2.5-PI (cross section up to 2.5 mm²). This tool is required for a reliable connection and is also recommended for maintenance purposes. Details on page 73.



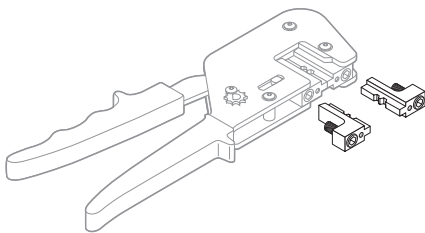
PI-TOOL-SET-02

Metal toolbox containing a hydraulic crimp tool, crimping dies and the crimps required for the connection of PI heating cables and cold leads in conjunction with the connection/splice kits type CS-150-6-PI (cross section 4-6 mm²) and CS-150-25-PI (cross section 10-25 mm²). This tool is required for a reliable connection and is also recommended for maintenance purposes. Details on page 73.



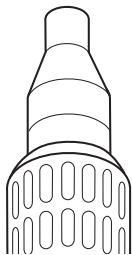
CW-CT-KIT

Crimp tool for installation of crimps for the connection/splice kits type: CS20-2.5-...



CW-CT-DIE

Spare set of dies for crimp tool CW-CT-KIT and crimps of 2.5 mm².



CV-1983-220V-3060W

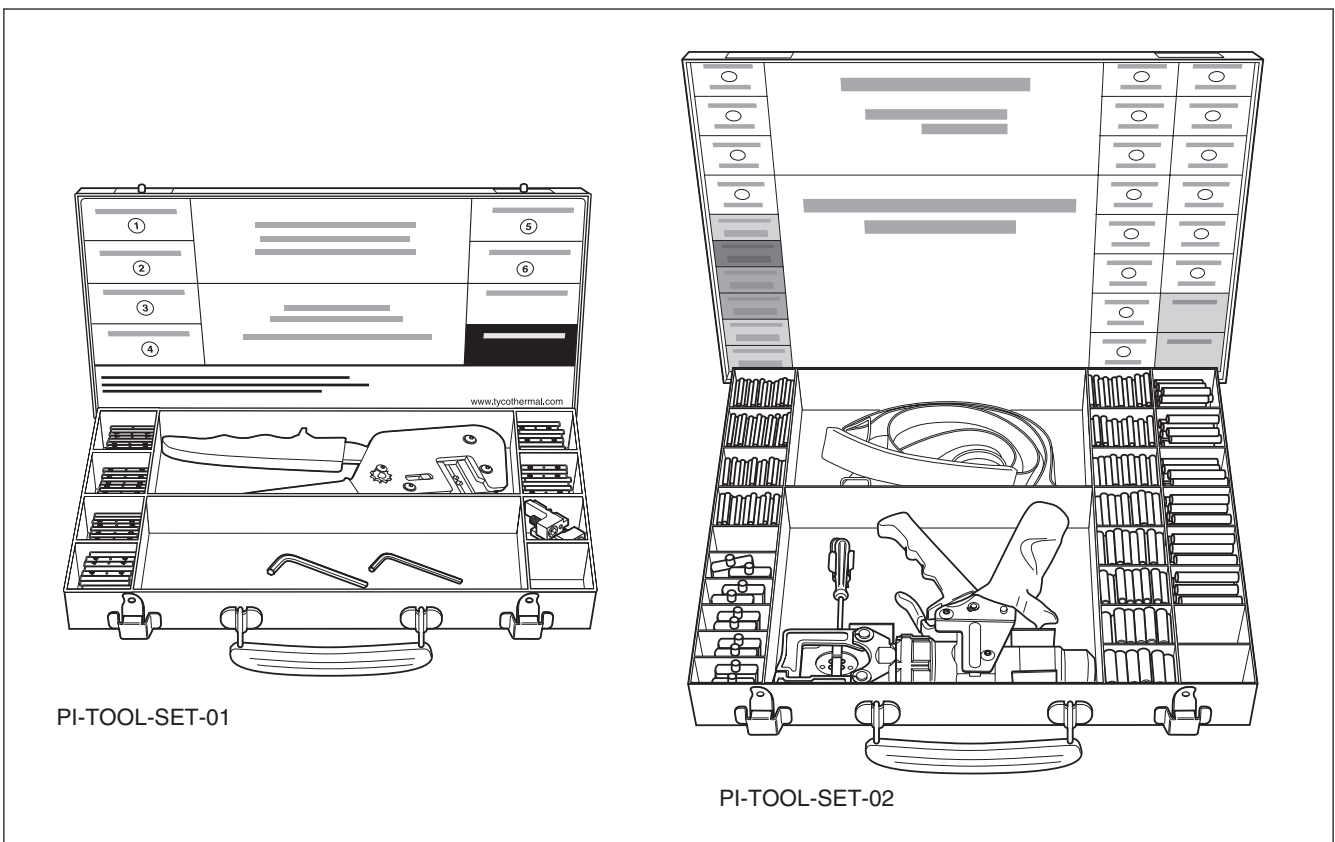
High power heat gun for heat shrink components such as CS20-2.5-PI-NH
Power output: 3 kW.

Electrical connection system for PI heating cables

The PI-TOOL-SET-xx is a handy metal box containing all materials required to connect Polymer Insulated (PI) heating cables to a suitable cold lead as well as to splice two PI heating cables. Electrical continuation is maintained via specially engineered crimps, that provide a highly reliable electrical (gas tight) connection. In order to assure consistently reliable

connections, the crimp is to be performed with the specified crimp tool (PI-TOOL-xx) equipped with the appropriate crimping dies (CD-PI-xx). Different tools are available: a ratcheting type tool for connecting small size cables (up to 2.5 mm²) and an hydraulic tool for large size cables (from 4 to 25 mm²). Apart from the crimp tool and dies, the kit

contains a variety of crimps (CRP-PI-xx). The tables on this datasheet are providing an overview of the possible combinations of tools, dies and crimps for various PI heating cables. Packs containing 10 pc of crimps are available as spare parts. Connection kits providing the insulation of the connection, have to be ordered separately.



Components

Application	Electrical connection system for Polymer Insulated (PI) heating cables.	
Kit contents	PI-TOOL-SET-01	PI-TOOL-SET-02
Crimp tool	PI-TOOL-01	PI-TOOL-02
Crimping die	CD-PI-01, CD-PI-02	CD-PI-03, CD-PI-04, CD-PI-05, CD-PI-06
Crimps	CRP-PI-01 to CRP-PI-06 (50 pc each)	CRP-PI-07 to CRP-PI-17 (50 pc each) CRP-PI-18 to CRP-PI-24 (25 pc each)
Ordering details		
Order reference (Weight)	1244-000583 (2.5 kg)	1244-000584 (12.5 kg)

General Accessories

Crimp tool set with various inserts and crimps	Part number		
PI-TOOL-SET-01	1244-000583	Complete set for cold leads / heating cables up to 2.5 mm ²	
PI-TOOL-SET-02	1244-000584	Complete set for cold leads / heating cables from 4 to 25 mm ²	

Crimp tools (spare part)	Part number	Crimping dies (spare part)	Part number
PI-TOOL-01	1244-000549	CD-PI-01	1244-000550
		CD-PI-02	1244-000554
PI-TOOL-02	1244-000551	CD-PI-03	1244-000552
		CD-PI-04	1244-000553
		CD-PI-05	1244-000555
		CD-PI-06	1244-000556

Compatibility- and selection chart and selection for crimps, dies and tools.

 Table 1: PI-TOOL-SET-01 for conductor size ≤ 2,5 mm²

Kit	Possible combinations for XPI heating cables (Ω/km)		Possible combinations for ICW-T heating cables (Ω/km)		Crimp type	Part number	Spare tool & crimping die		
	FROM	TO	FROM	TO	(10 pieces per pack)		Die	Tool	
CS-150-2.5-PI	65 / 200 380 / 480 600 / 700 810 / 1000 1440 / 1750 2000 / 3000 4000 / 4400 5600 / 7000 8000	65 / 200 380 / 480 600 / 700 810 / 1000 1440 / 1750 2000 / 3000 4000 / 4400 5600 / 7000 8000	25 / 31.5 50 / 68 78 / 150 170 / 200 370 / 430 600 / 730 820 / 1000 1440 / 1730 2160 (*)	25 / 31.5 50 / 68 78 / 150 170 / 200 370 / 430 600 / 730 820 / 1000 1440 / 1730 2160 (*)	CRP-PI-01	1244-000558	CD-PI-01 (white)	PI-TOOL-01	
	11.7	65 / 200 380 / 480 600 / 700 810 / 1000 1440 / 1750 2000 / 3000 4000 / 4400 5600 / 7000 8000	11.6	25 / 31.5 50 / 68 78 / 150 170 / 200 370 / 430 600 / 730 820 / 1000 440 / 1730 2160 (*)	CRP-PI-02	1244-000559			
	11.7 / 15 17.8 / 25 50 / 80 100 / 150 320	11.7 / 15 17.8 / 25 50 / 80 100 / 150 320	11,6 / 15 17,8 / 100 330	11,6 / 15 17,8 / 100 330	CRP-PI-03	1244-000544			
	7 / 10	65 / 200 380 / 480 600 / 700 810 / 1000 1440 / 1750 2000 / 3000 4000 / 4400 5600 / 7000 8000	7 / 10	25 / 31.5 50 / 68 78 / 150 170 / 200 370 / 430 600 / 730 820 / 1000 1440 / 1730 2160 (*)	CRP-PI-04	1244-000560			CD-PI-02 (Black)
	7 / 10 / 11.7 / 31.5 100	15 / 17.8 25 / 50 / 80 150 / 320	7 / 10	15 / 17.8 330	CRP-PI-05	1244-000561			
	7 / 10 / 11.7	7 / 10 / 11.7 31.5 / 100	7 / 10 / 11.6 31.5 / 100	7 / 10 / 11.6	CRP-PI-06	1244-000562			

(*) For use with conductor constructions of ICW with higher resistances contact Tyco Thermal Controls.

Crimp selection and installation table.

 Table 2: PI-TOOL-SET-02 for conductor size 4 to 25 mm²

Kit	Possible combinations for XPI heating cables (Ω/km)		Possible combinations for ICW-T heating cables (Ω/km)		Crimp type (10 pieces per pack)	Part number	Spare tool & crimping die	
	FROM	TO	FROM	TO			Die	Tool
CS-150-6-PI	4.4	10 / 11.7 / 15	4.4	10 / 11.6 / 15	CRP-PI-07	1244-000563	CD-PI-03 (Grey)	PI-TOOL-SET-02
	4.4	7	4.4	7	CRP-PI-08	1244-000564		
	4.4	4.4	4.4	4.4	CRP-PI-09	1244-000546		
	2.9	10 / 11.7 31.5 / 100	2.9	10 / 11.6	CRP-PI-10	1244-000565	CD-PI-04 (Blue)	
	2.9	7	2.9	7	CRP-PI-11	1244-000566		
	2.9	4.4	2.9	4.4	CRP-PI-12	1244-000567		
	2.9	2.9	2.9	2.9	CRP-PI-13	1244-000568		
CS-150-25-PI	1.8	7	1.8	7	CRP-PI-14	1244-000569	CD-PI-05 (Red) V + N	
	1.8	4.4	1.8	4.4	CRP-PI-15	1244-000570		
	1.8	2.9	1.8	2.9	CRP-PI-16	1244-000571		
	1.8	1.8	1.8	1.8	CRP-PI-17	1244-000548	CD-PI-06 (Yellow) V+N	
	1.1	4.4	1.1	4.4	CRP-PI-18	1244-000572		
	1.1	2.9	1.1	2.9	CRP-PI-19	1244-000573		
	1.1	1.8	1.1	1.8	CRP-PI-20	1244-000574		
	0.8	2.9	0.8	2.9	CRP-PI-22	1244-000576	CD-PI-06 (Yellow) V+N	
	0.8	1.8	0.8	1.8	CRP-PI-23	1244-000577		
	0.8	1.1	0.8	1.1	CRP-PI-24	1244-000578		

The electrical insulation for the crimp connection has to be ordered separately. (CS-150-xx-PI on page 67)

The crimp for the electrical connection of the braid is included in the CS-150-XX-PI kit.

Table 3: CS-150-XX-PI braid crimps

Kit	Braid crimp	Partnumber	Die	Tool
CS-150-2,5-PI	CRP-BR-2,5-2,5 MM ²	1244-000994	CD-PI-02	PI-TOOL-01
CS-150-6-PI	CRP-BR-6-4 MM ²	1244-000996	CD-PI-03	PI-TOOL-02
CS-150-25-PI	CRP-BR-25-6 MM ²	1244-000995	CD-PI-04	PI-TOOL-02