

Ref: T123 – Rev 13 – March 02

Enclosure codes and operating temperature limits for Crompton Instruments products are listed in the selection table below. The enclosure code designation is detailed overleaf and complies with BS EN 60529 : 1992 and international standards.

The following factors should be taken into account when the choice of a suitable product is assessed.

On-site Protection

Select the product enclosure code, which will give the necessary degree of protection against the ingress of both foreign bodies and liquids.

Relative Humidity

All Crompton Instruments products are suitable for use in relative humidities up to 95% non-condensing. Higher humidity rated products may be available on request.

Tropical use

Consult Factory

Ambient Temperature

Standard products are calibrated at 23° and have a nominal range of use +/- 10°C in accordance with international standards.

Product Series	Model Type				Enclosure Code		Working Temp		Publication
					Standard	Optional	Minimum	Maximum	
10	016				IP55	-	-10°C	+55°C	SWCAT
120	128				IP54	-	-10°C	+55°C	SWCAT
50	056	057	058		IP54	IP55	-10°C	+60°C	SWCAT
70	077				IP54	IP55	-10°C	+70°C	SWCAT
80	083	084	086	087	IP67	-	-40°C	+70°C	SWCAT
240	242	243	244	246	IP54	IP55	-20°C	+60°C	SWCAT
26	262				IP66	-	0°C	+60°C	SWCAT
26	267				IP54	-	0°C	+60°C	SWCAT
770	771	772	773	775	IP54	-	0°C	+80°C	SWCAT
Ebony	M50,M60,M90,MA,MB,MC,MD,P6,P9, PB,PC,PD,S9				IP40	-	-20°C	+85°C	SWCAT
810	812	814	816	818	IP55	-	-40°C	+70°C	SWCAT
820	829				-	-	-20°C	+60°C	SWCAT
840	842	845	846		IP53	-	-10°C	+55°C	SWCAT
250 Protector	252	253	256		IP50	-	0°C	+60°C	SWCAT
250 Paladin	253		256		IP50	-	0°C	+60°C	SWCAT
250 Advantage	252	253	256		IP50	-	-10°C	+60°C	SWCAT
850	857	858	859		IP67	-	-20°C	+60°C	SWCAT
860	860/1/3/4/7/8/9				-	-	-20°C	+60°C	SWCAT
870	871	872	873		-	-	-20°C	+60°C	SWCAT
880	882	883	884	885 886	-	-	-20°C	+60°C	SWCAT
Integra 520	Quadratic				IP54	-	-10°C	+70°C	SWCAT
Integra 1000	Quadratic				IP54	-	0°C	+50°C	SWCAT
Integra 2000	Quadratic				IP54	IP65	0°C	+50°C	SWCAT
Integra 1000	Switchboard				IP54	-	-20°C	+70°C	SWCAT

TECHNICAL SHEET**Enclosure Codes and Calibration Temperatures**

BSEN60529 “specification for classification of degree of protection provided by enclosures” designates the degree of protection by code comprising two letters and two numerals. The code is made up as follows:-

Code Letters IP	Protections against accidental contact and ingress of solid foreign bodies and water.
1 st Number	Degree of protection against accidental contact and ingress of solid foreign bodies.
2 nd Number	Degree of protection against ingress of water.

1st Number

0	Non-protected	No special protection
1	Protected against solid objects greater than 50mm.	A large surface of the body, such as a hand (but no protection against deliberate access). Solid objects exceeding 50mm in diameter.
2	Protected against solid objects greater than 12mm.	Fingers or similar objects not exceeding 80mm in length. Solid objects exceeding 12mm in diameter.
3	Protected against solid objects greater than 2.5mm.	Tools, wires, etc, of diameter or thickness greater than 2.5mm. Solid objects exceeding 2.5mm in diameter.
4	Protected against solid objects greater than 1.0mm.	Wires or strips of thickness greater than 1.0mm. Solid objects exceeding 1.0mm in diameter.
5	Dust-protected.	Ingress of dust is not totally prevented but dust does not enter in sufficient quantity to interfere with satisfactory operation of the equipment.
6	Dust-tight.	No ingress of dust.

2nd Number

0	Non-protected.	No special protection.
1	Protected against dripping water.	Dripping water (Vertically falling drops) shall have no harmful effects.
2	Protected against dripping water when tilted up to 15°.	Vertically dripping water shall have no harmful effect when the enclosure is tilted at any angle up to 15° from its normal position.
3	Protected against spraying water.	Water falling as a spray at an angle up to 60° from the vertical shall have no harmful effect.
4	Protected against splashing water.	Water splashed against the enclosure from any direction will have no harmful effect.
5	Protected against water jets.	Water projected by a nozzle against the enclosure shall have no harmful effect.
6	Protected against powerful water jets.	Projected in powerful jets shall not enter the enclosure in harmful quantities.
7	Protected against the effects of immersion.	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time.
8	Protected against submersion.	The equipment is suitable for continuous submersion in water under conditions, which shall be specified by the manufacturer.

Terminals are not coded separately since the effective enclosure depends on the equipment in which the instrument is housed.

A typical enclosure is IP54, i.e. the instrument is not totally protected against ingress of dust, but dust will not interfere with the operation of the instrument and water splashed against the enclosure from any direction will have no harmful effect.

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The Information contained in these installation instructions is for use only by installers trained to make electrical power installations and is intended to describe the correct method of installation for this product. However, Tyco Electronics has no control over the field conditions, which influence product installation. It is the user's responsibility to determine the suitability of the installation method in the user's field conditions. Tyco Electronics' only obligations are those in Tyco Electronics' standard Conditions of Sale for this product and in no case will Tyco Electronics be liable for any other incidental, indirect or consequential damages arising from the use or misuse of the products. Crompton is a trade mark.



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