

Heater Selection for Freeze Protection up to -25°C

1 Required heating power in instrument enclosures

Insulation	Window	MULTIBOX								DIABOX			MINIBOX
		25	48	60	70	80	100	150	170	87	107	137	21
without	without	100W	200W	200W	200W	250W	250W	300W	400W	200W	250W	300W	75W
	with	150W	200W	200W	250W	300W	300W	400W	400W	250W	250W	300W	75W
arctic-PP	without	50W	50W	50W	75W	75W	75W	100W	100W	50W	50W	50W	50W
arctic-Alu	with	50W	75W	75W	100W	100W	100W	150W	150W	50W	75W	75W	50W

For INTERTEC protective cabinets and shelters: $P=K[W/K]^2 \cdot 40K$. K taken from data sheet or INTERTEC S software.

These values take into account thermal losses in standard installations as well as the wind factor.

If the installation requires many openings, holes, cable entries etc., we recommend selecting a heater with the next higher power rating.

2 Heaters for hazardous areas (CP)

Required heating power	Type of heater Temperature class T3	Type of heater Temperature class T4
50W	CP MICROTHERM DNA 75 T3 TS	CP MICROTHERM DNA 50 T4 TS
75W	CP MICROTHERM DNA 75 T3 TS	CP MULTITHERM DNA 75 T4 TS
100W	CP MULTITHERM DNA 100 T3 TS	CP MULTITHERM DPA 100 T4 TS
150W	CP MULTITHERM DNA 150 T3 TS	CP VARITHERM DPA 200 T4 80 TS
200W	CP MULTITHERM DPA 200 T3 TS	CP VARITHERM DPA 200 T4 80 TS
250W	CP MULTITHERM DPA 250 T3 TS	CP VARITHERM DPA 300 T4 100 TS
300W	CP VARITHERM DPA 300 T3 60 TS	CP VARITHERM DPA 300 T4 100 TS
400W	CP VARITHERM DPA 400 T3 80 TS	

We recommend selecting a T3 heater, if permitted by the safety zone. T6 heaters are available upon request.

3 Heaters for non-hazardous areas (not Ex)

Required heating power	Type of heater Protection degree IP 68 (completely sealed)	Type of heater Protection degree IP 20
50W	CP MULTITHERM 75 N TS	E 156
75W	CP MULTITHERM 75 N TS	E 156
100W	CP MULTITHERM 100 N TS	E 156
150W	CP MULTITHERM 150 N TS	E 156
200W	CP MULTITHERM 200 P TS	E 156
250W	CP MULTITHERM 250 P TS	E 156
300W	CP VARITHERM 300/60 TS	E 155
400W	CP VARITHERM 400/80 TS	E 155

Heaters with the suffix TS have an integrated freeze-protection thermostat in the connection cable, switching the heater off at temperatures exceeding approx. 10°C .