



QUINNmerriott

PRESSED PANEL LST RADIATORS TECHNICAL INFORMATION



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Low Surface Temperature Radiators

Specifications and Dimensions

Quinn Low Surface Temperature radiators are manufactured from a single-piece cover, making them easy and quick to install, with no visible welds or joints to trap dust. They are forward-hinged for easy access to the emitter for cleaning or maintenance.

As well as accepting standard valves the Quinn Low Surface Temperature radiator can be fitted with the stylish Quinn TRV kit for flexible performance and economy.

Quinn Low Surface Temperature covers are used with standard Quinn Round Top Radiators. This price list shows the dimensions and heat outputs of the LSTs and identifies the correct radiator to be used with each.

PRODUCT RANGE

The Quinn LST range comprises of single and double panel radiators in five heights with lengths from 500mm to 2000mm.

EMITTER

The Quinn LST cover is designed to accommodate a standard Quinn emitter with four connections. All standard connections are 1/2" BSP.

COVER

The Quinn LST cover comprises of a strong single-piece cover that's quick and easy to install. The unique design allows it to be fitted over a standard Quinn emitter. The cover is forward hinged allowing easy access to the emitter for internal cleaning and maintenance, but has a simple locking device to prevent unauthorised access.

PACKAGING

The Quinn LST is supplied in two packs. The Quinn emitter is packaged in picture frame wrapping with integral protection for the backclips and wrapped in a vacuum sealed heavy duty polythene. The cover is packaged in a four-sided box to give complete protection.

BRACKETS

All radiators in the range are supplied with two or more brackets depending on the length per emitter and two brackets per cover. Brackets supplied with single and double convectors provide a wall clearance of 23mm.

BRACKET LUGS

Two pairs of lugs are positioned as standard on emitters less than 1800mm (70") long. A third pair of lugs is fixed centrally on emitters 1800mm (70") long and over.

THERMOSTAT RADIATOR VALVES

EXTERNAL CONTROL HEAD

Consists of a 15mm angled valve body fitted to the emitter inside the LST cover and linked by a capillary tube to an external control and sensing head. The head is secured by simply tightening the unit through a pre-formed knock-out in the LST cover. A specially-designed grip on the valve head facilitates use by people with limited hand mobility. These TRV valves are unsuitable for single pipe systems.

INTERNAL CONTROL HEAD

Consists of a 15mm angled valve body and control head fitted to the emitter inside the LST cover, with an external sensor attached by a self-adhesive pad to the underside of the cover. The control head is tamper proof, being accessible only to authorised personnel by simply unlocking the hinged LST cover.

Low Surface Temperature Radiators

Technical Specifications

OUTPUTS

All radiators have been manufactured and tested in accordance with BS EN 442.

FINISH

All radiators are in a powder coated finish similar to RAL 9016 anti-bacterial paint to ISO 22196 standards. The LST was designed to comply with NHS Safe Surface Temperature guidelines, where maximum surface temperatures should not exceed 43°C.

QUALITY

All radiators are manufactured under a BS EN ISO 9001: 2000 quality system accepted by BSI.

WARRANTY

Each radiator is under full warranty for ten years in respect of defective materials and manufacture.

TESTING

All radiators are individually tested to 10 bar pressure.

TAPPING-TO-TAPPING DIMENSIONS

All tapping-to-tapping dimensions may be obtained by subtracting 5mm from the nominal emitter length (accurate to +2mm).

INSTALLATION

For indirect systems or closed circuits only at a working pressure not exceeding 8 bar.

WATER TREATMENT

Please refer to Quinn Round Top specification sheet.

CONDITIONS OF SALE

Our standard Conditions of Sale apply to all transactions – a copy is available on request.

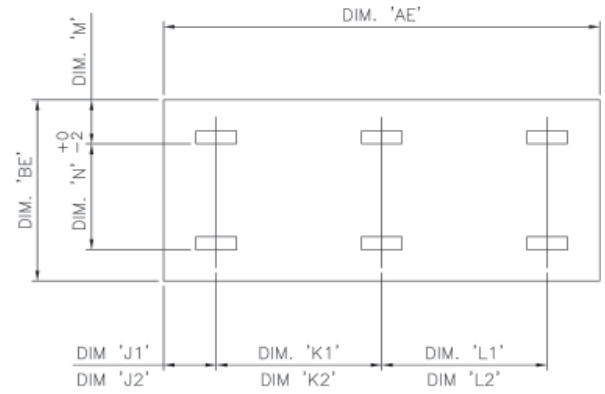
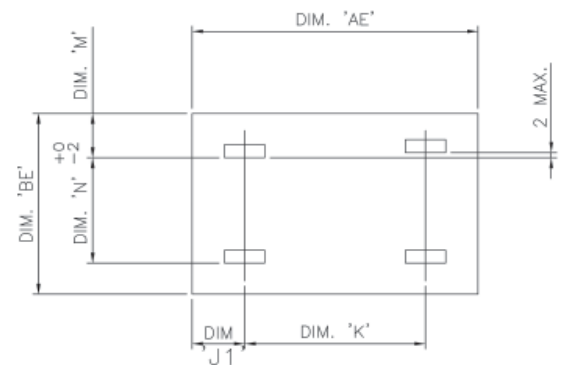
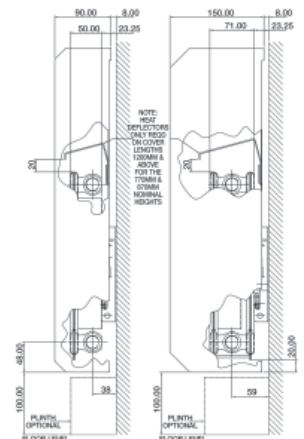
CONVERSION INFORMATION

The outputs quoted in this publication are based on a Delta T of 50°C.

INSTALLATION DIAGRAM

(All dimensions quoted are in mm)

The length and height of the correct emitter may be obtained by subtracting 200mm from the length of the cover and 270mm* from the height. (*150mm on 450mm high LSTs)
Tapping to tapping dimensions may be obtained by subtracting 5mm from the nominal emitter length.
Note: The actual emitter is contained within the cover and its location can be determined by consulting this installation diagram.



LUG LOCATIONS							
AE	J1	K1	L1	J2	K2	L2	QTY.
295	75	150	-	87.5	125	-	4
395	125	150	-	137.5	125	-	4
495	125	250	-	162.5	175	-	4
595	125	350	-	162.5	275	-	4
695	125	450	-	162.5	375	-	4
895	125	650	-	162.5	575	-	4
995	125	750	-	162.5	675	-	4
1095	125	850	-	162.5	775	-	4
1195	125	950	-	162.5	875	-	4
1395	125	1150	-	162.5	1075	-	4
1595	125	1350	-	162.5	1275	-	4
1795	125	775	775	162.5	750	725	6

Note:
Dimensions 'J1', 'K1' & 'L1' refer to the lugs on the panel (double panel+). Dimensions 'J2', 'K2' & 'L2' refer to the lugs on the fin (single panel)

Note:
Lug positions on 500mm (20") cover length will be 200mm (8") from each end.

Bracket Lug heights			
BE	300	400	500
M	110	110	110
N	105	205	305
	405		

Quinn - LST

Heat outputs to BS EN442 certification

Outputs based on a mean radiator water temperature of 70°C (158°F) and a room temperature of 20°C (68°F) - delta t 50°C. Max surface temperature 43°C.

Nominal Height	Length		Single Convector					Double Panel Plus					Emitter Dimensions		
	mm	inch	Exponent "n"	Order Code	BTU/hr	Watts	Emitter Order Code	Exponent "n"	Order Code	BTU/hr	Watts	Emitter Order Code	Nominal Length	mm	inches
					ΔT50	ΔT50				ΔT50	ΔT50				
450 MM	800	31	-	QLSC450811	1079	316	Q11306RT	-	QLSC450821	1687	494	Q21306RT	600	(24)	
	1200	47	-	QLSC451211	1799	527	Q11310RT	-	QLSC451221	2813	824	Q21310RT	1000	(39)	
	1400	55	-	QLSC451411	2158	632	Q11312RT	-	QLSC451421	3376	989	Q21312RT	1200	(47)	
	1800	71	-	QLSC451811	2878	843	Q11316RT	-	QLSC451821	4500	1318	Q21316RT	1600	(63)	
570 MM	600	24	1,3459	QLSC570611	751	220	Q11304RT	1,3148	QLSC570621	1170	343	Q21304RT	400	(16)	
	700	28	1,3459	QLSC570711	938	275	Q11305RT	1,3148	QLSC570721	1464	429	Q21305RT	500	(20)	
	900	35	1,3459	QLSC570911	1310	384	Q11307RT	1,3148	QLSC570921	2051	601	Q21307RT	700	(28)	
	1100	43	1,3459	QLSC571111	1686	494	Q11309RT	1,3148	QLSC571121	2634	772	Q21309RT	900	(35)	
	1300	51	1,3459	QLSC571311	2061	604	Q11311RT	1,3148	QLSC571321	3221	944	Q21311RT	1100	(43)	
	1400	55	1,3459	QLSC571411	2249	659	Q11312RT	1,3148	QLSC571421	3514	1030	Q21312RT	1200	(47)	
	1600	63	1,3459	QLSC571611	2624	769	Q11314RT	1,3148	QLSC571621	4098	1201	Q21314RT	1400	(55)	
1800	71	1,3459	QLSC571811	2996	878	Q11316RT	1,3148	QLSC571821	4685	1373	Q21316RT	1600	(63)		
670 MM	600	24	1,3252	QLSC670611	969	284	Q11404RT	1,3208	QLSC670621	1443	423	Q21404RT	400	(16)	
	700	28	1,3252	QLSC670711	1211	355	Q11405RT	1,3208	QLSC670721	1805	529	Q21405RT	500	(20)	
	900	35	1,3252	QLSC670911	1692	496	Q11407RT	1,3208	QLSC670921	2525	740	Q21407RT	700	(28)	
	1100	43	1,3252	QLSC671111	2177	638	Q11409RT	1,3208	QLSC671121	3245	951	Q21409RT	900	(35)	
	1300	51	1,3252	QLSC671311	2661	780	Q11411RT	1,3208	QLSC671321	3968	1163	Q21411RT	1100	(43)	
	1400	55	1,3252	QLSC671411	2904	851	Q11412RT								
	1600	63	1,3252	QLSC671611	3388	993	Q11414RT	1,3208	QLSC671621	5050	1480	Q21414RT	1400	(55)	
	1800	71	1,3252	QLSC671811	3869	1134	Q11416RT	1,3208	QLSC671821	5770	1691	Q21416RT	1600	(63)	
2000	79	1,3252	QLSC672011	4354	1276	Q11418RT	1,3208	QLSC672021	6493	1903	Q21418RT	1800	(71)		
770 MM	500	20	1,3045	QLSC770511	851	249	Q11503RT	1,3268	QLSC770521	1276	374	Q21503RT	300	(12)	
	600	24	1,3045	QLSC770611	1133	332	Q11504RT	1,3268	QLSC770621	1703	499	Q21504RT	400	(16)	
	700	28	1,3045	QLSC770711	1419	416	Q11505RT	1,3268	QLSC770721	2129	624	Q21505RT	500	(20)	
	800	31	1,3045	QLSC770811	1703	499	Q11506RT	1,3268	QLSC770821	2552	748	Q21506RT	600	(24)	
	900	35	1,3045	QLSC770911	1982	581	Q11507RT	1,3268	QLSC770921	2979	873	Q21507RT	700	(28)	
	1100	43	1,3045	QLSC771111	2552	748	Q11509RT	1,3268	QLSC771121	3828	1122	Q21509RT	900	(35)	
	1400	55	1,3045	QLSC771411	3402	997	Q11512RT	1,3268	QLSC771421	5104	1496	Q21512RT	1200	(47)	
	1600	63	1,3045	QLSC771611	3968	1163	Q11514RT	1,3268	QLSC771621	5957	1746	Q21514RT	1400	(55)	
	1800	71	1,3045	QLSC771811	4538	1330	Q11516RT	1,3268	QLSC771821	6807	1995	Q21516RT	1600	(63)	
2000	79	1,3045	QLSC772011	5104	1496	Q11518RT	1,3268	QLSC772021	7660	2245	Q21518RT	1800	(71)		
870 MM	500	20	1,3539	QLSC870511	938	275	Q11603RT	1,3145	QLSC870521	1465	429	Q21603RT	300	(12)	
	600	24	1,3539	QLSC870611	1249	366	Q11604RT	1,3145	QLSC870621	1953	572	Q21604RT	400	(16)	
	700	28	1,3539	QLSC870711	1563	458	Q11605RT	1,3145	QLSC870721	2443	716	Q21605RT	500	(20)	
	800	31	1,3539	QLSC870811	1877	550	Q11606RT	1,3145	QLSC870821	2931	859	Q21606RT	600	(24)	
	900	35	1,3539	QLSC870911	2187	641	Q11607RT	1,3145	QLSC870921	3419	1002	Q21607RT	700	(28)	
	1100	43	1,3539	QLSC871111	2811	824	Q11609RT	1,3145	QLSC871121	4401	1290	Q21609RT	900	(35)	
	1300	51	1,3539	QLSC871311	3439	1008	Q11611RT	1,3145	QLSC871321	5370	1574	Q21611RT	1100	(43)	
	1400	55	1,3539	QLSC871411	3750	1099	Q11612RT	1,3145	QLSC871421	5858	1717	Q21612RT	1200	(47)	
	1600	63	1,3539	QLSC871611	3474	1282	Q11614RT	1,3145	QLSC871621	6834	2003	Q21614RT	1400	(55)	
	1800	71	1,3539	QLSC871811	5002	1466	Q11616RT	1,3145	QLSC871821	7813	2290	Q21616RT	1600	(63)	
2000	79	1,3539	QLSC872011	5626	1649	Q11618RT	1,3145	QLSC872021	8789	2576	Q21618RT	1800	(71)		

Optional LST Plinths

OPTIONAL BOTTOM PLINTHS

Plinth Height	Length (mm)	Length (in)	Single Convector	Double Panel Plus
			Order Code	Order Code
100	500	19	LSTPL05S	LSTPL05D
100	600	23	LSTPL06S	LSTPL06D
100	700	27	LSTPL07S	LSTPL07D
100	800	31	LSTPL08S	LSTPL08D
100	900	35	LSTPL09S	LSTPL09D
100	1100	43	LSTPL11S	LSTPL11D
100	1200	47	LSTPL12S	LSTPL12D
100	1300	51	LSTPL13S	LSTPL13D
100	1400	55	LSTPL14S	LSTPL14D
100	1600	63	LSTPL16S	LSTPL16D
100	1800	70	LSTPL18S	LSTPL18D
100	2000	79	-	LSTPL20D

THERMOSTATIC RADIATOR VALVES

Order Code	
External	TRV001
Internal	TRV005

LOCKSHIELD VALVE

Order Code	
LOCK001	

Quinn Radiators

Conversion Information

The outputs quoted in this publication are based on a Delta T of 50°C.

To calculate other operating conditions, the following example should be applied:

EXAMPLE:

Add flow water temperature (75°C) and the return water temperature (65°C) together (140°C), divide by two (70°C) and then subtract the room temperature (20°C). This will give you a Delta T factor of 50°C.

Degrees Centigrade						
Delta T factors in °C and °F other than 50°C (122°F), Exponent n = 1.3	5°C	0.0501	30°C	0.5148	55°C	1.1319
	10°C	0.1234	35°C	0.6290	60°C	1.2675
	15°C	0.2091	40°C	0.7482	65°C	1.4065
	20°C	0.3039	45°C	0.8720	70°C	1.5487
	25°C	0.4061	50°C	1.0000	75°C	1.6940

Degrees Fahrenheit						
Delta T factors in °C and °F other than 50°C (122°F), Exponent n = 1.3	10°F	0.0387	60°F	0.3975	110°F	0.8741
	20°F	0.0953	70°F	0.4857	120°F	0.9787
	30°F	0.1614	80°F	0.5778	130°F	1.0861
	40°F	0.2346	90°F	0.6734	140°F	1.1959
	50°F	0.3136	100°F	0.7722	150°F	1.3081

Quinn Radiators

Water Contents & Dry Weights

WATER CONTENT

Please refer to relevant Emitter codes in Panel Radiators Technical Catalogue. To calculate, take the water content or dry weight per metre, divide by 1,000 and multiply it by the length of the radiator shown in the catalogue.

LST RADIATORS

QUINN LST - Radiator Water Content

Please refer to relevant Emitter codes in the Panels radiator brochure and reference Water Content and Dry Weights in same.

QUINN LST - Radiator Dry Weight

Please refer to relevant Emitter codes in the Panels radiator brochure and reference Water Content and Dry Weights in same.

How to Order

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AERATED THERMAL BLOCKS



CEMENT



CONCRETE ROOFTILES



QUINN THERM (PIR)



QUINN LITE PAC



PRESTRESSED



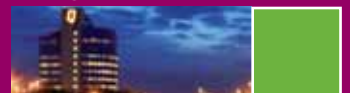
QUARRY



TARMAC



ENERGY



FINANCIAL SERVICES



GLASS



HOTELS



PACKAGING



PLASTICS



PROPERTY



RADIATORS



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