HEAVY DUTY ELECTRIC

The robust, vitreous enamel, hot water system for durability in a wider range of water quality environments.

The Rheem Heavy Duty Electric Products have been reliable and dependable for decades.

Their Service and Training Facilities are second to none.

Dale Craig,
Client Service Manager - Asset Services
CV SERVICES

CASE STUDY

PERTH STADIUM

Challenge

Perth Stadium, opened in 2018 is a multi-purpose venue capable of hosting 60,000 fans for sporting and entertainment events. A stable and robust hot water solution that could meet peak demand was required.

Hot Water Solution

To accommodate such a large user requirement on hot water, Rheem installed 130 x Electric Heavy Duty 50L and 17 x Electric Heavy Duty 315L. Additionally mechanical heating with Heat Exchanger and large SS Storage complemented the system.

HEAVY DUTY ELECTRIC

FOR SMALL TO LARGE APPLICATIONS

ELECTRIC | DOUBLE-COATED ENAMEL | LARGER ANODE | UP TO 36 kW | HIGH PRESSURE

Designed for domestic to a large scale of commercial applications and most water chemistries.

Quality

High quality is one reason for Rheem's reputation with the experts. Take the Rheem storage cylinder: it's made from a special grade of steel and lined with a double coat of vitreous enamel which is better suited to a wider variety of water conditions and largers anodes provide greater protection.

Never lose pressure

HDE uses true multipoint operation through large 32mm connections with no exchange coils to restrict pressure or flow and it can be used with low pressure systems if needed.

More key features

- Suitable for either indoor or outdoor installation
- Up to 36kW (in one water heater) providing plenty of hot water
- Trade adjustable thermostats suitable for sanitizing
- A manifold of 8 x A616315 Rheem commercial electric water heaters can deliver up to 7,480 litres of hot water in the first hour

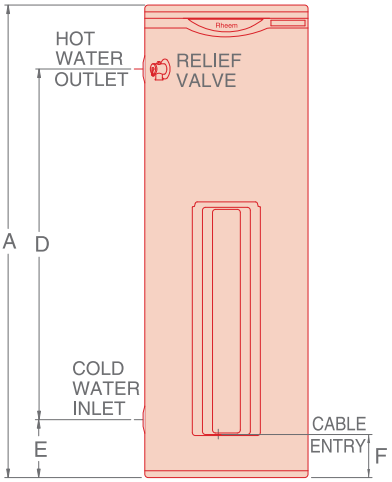
Heavy Duty Electric warranty: 5 years on cylinder, 1 year on parts & labour

TECHNICAL ELECTRIC PERFORMANCE DETAILS							
Heating Elements		3 x 3.6 kW	3 x 4.8 kW	3 x 6.0 kW	6 x 3.6 kW	6 x 4.8 kW	6 x 6.0 kW
Total Input	kW	10.8	14.4	18.0	21.6	28.8	36.0
Current (per phase)	Amps	15	20	25	30	40	50
Litres Recovery Per Hour at Rise of	20°C	460	620	770	930	1240	1550
	30°C	310	410	520	620	830	1030
	40°C	230	310	390	460	620	770
	50°C	190	250	310	370	500	620
	60°C	150	210	260	310	410	520
	65°C	140	190	240	290	380	480
	70°C	130	180	220	270	350	440
	75°C	120	170	210	250	330	410

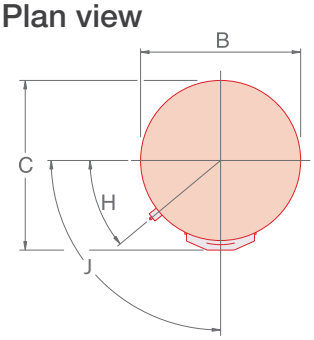
Note: Figures rounded to the nearest 10 litres.

TECHNICAL DATA

Side view



Plan view



DIMENSIONS AND TECHNICAL DATA TABLE INDOOR/OUTDOOR MODELS					
Model			A613 050	A613 315	A616 315
Storage Capacity		Litres	60	325	325
Delivery Rating		Litres	50	315	315
Dimensions	A	mm	675	1640	1640
	B	mm	436	638	638
	C	mm	476	678	678
	D	mm	405	1294	1294
	E	mm	90	128	128
	F	mm	80	130	130
	H	Degrees	30°	32°	32°
	J	Degrees	90°	90°	90°
Weight – Empty		kg	34	96	98
Inlet/Outlet Connections (BSPF)			RP1¼	RP1¼	RP1¼
T&PR Valve Connection (BSPF)			RP¾	RP¾	RP¾
T&PR Valve Setting		kPa	1000	1000	1000
Expansion Control Valve (ECV)* Setting		kPa	850	850	850
Max. Water Supply Pressure					
without ECV* fitted		kPa	800	800	800
with ECV* fitted		kPa	680	680	680
Factory Thermostat Setting		°C	70	70	70
Min. Thermostat Setting		°C	60	60	60
Manifold – Min. Centre to Centre		mm	685	890	890
Electrical Connection					
240V			single phase^	single phase^	
415V			three phase	three phase	three phase
Heating Elements		kW	3 x 3.6	3 x 3.6	6 x 3.6
		or	3 x 4.8	3 x 4.8	6 x 4.8
		or	–	3 x 6.0	6 x 6.0

* Expansion control valve not supplied with the water heater.

^ Before using this application please contact the Commercial Team at Rheem New Zealand Ltd

APPROXIMATE DAILY ENERGY CONSUMPTION				
Daily Hot Water Usage @ 50°C Temp Rise (Litres)	Energy Content of Hot Water (kWh)	RHEEM COMMERCIAL ELECTRIC WATER HEATERS Approximate Energy Used Per Day (kWh)		
		A613 050	A613 315	A616 315
0	0.0	1.8	3.1	3.2
50	2.9	4.7	6.0	6.1
100	5.8	7.6	8.9	9.0
150	8.7	10.5	11.8	11.9
200	11.6	13.4	14.7	14.8
250	14.5	16.3	17.6	17.7
300	17.4	19.2	20.5	20.6
350	20.3	22.1	23.4	23.5
400	23.3	25.1	26.4	26.5
450	26.2	28.0	29.3	29.4
500	29.1	30.9	32.2	32.3
600	34.9	36.7	38.0	38.1
700	40.7	42.5	43.8	43.9
800	46.5	48.3	49.6	49.7
900	52.3	54.1	55.4	55.5
1000	58.1	59.9	61.2	61.3
1250	72.7	74.5	75.8	75.9
1500	87.2	89.0	90.3	90.4
1750	101.7	103.5	104.8	104.9
2000	116.3	118.1	119.4	119.5
2500	145.3	–	148.4	148.5
3000	174.4	–	–	177.6
3500	203.5	–	–	206.7
4000	232.6	–	–	235.8
5000	290.7	–	–	293.9

PERFORMANCE DATA

Model	No. of Units in Parallel	Initial Delivery (Litres)	Heating Elements (kW)	Total Kilowatts	Available Litres of Hot Water at 50°C Temperature Rise Over Peak Period					
					1 Hour	2 Hours	3 Hours	4 Hours	6 Hours	8 Hours
A613 050	1	50	3 x 3.6	10.8	240	420	610	790	1160	1540
			3 x 4.8	14.4	300	550	790	1040	1540	2030
A613 315	1	315	3 x 3.6	10.8	500	690	870	1060	1430	1800
			3 x 4.8	14.4	560	810	1060	1310	1800	2300
			3 x 6.0	18.0	620	930	1240	1550	2170	2790
	2	630	3 x 3.6	21.6	1000	1370	1740	2120	2860	3600
			3 x 4.8	28.8	1130	1620	2120	2610	3600	4590
			3 x 6.0	36.0	1250	1870	2490	3110	4350	5580
	3	945	3 x 3.6	32.4	1500	2060	2620	3170	4290	5400
			3 x 4.8	43.2	1690	2430	3170	3920	5400	6890
			3 x 6.0	54.0	1870	2800	3730	4660	6520	8380
A616 315	1	315	6 x 3.6	21.6	690	1060	1430	1800	2540	3290
			6 x 4.8	28.8	810	1310	1800	2300	3290	4280
			6 x 6.0	36.0	930	1550	2170	2790	4030	5270
	2	630	6 x 3.6	43.2	1370	2120	2860	3600	5090	6570
			6 x 4.8	57.6	1620	2610	3600	4590	6570	8560
			6 x 6.0	72.0	1870	3110	4350	5580	8060	10540
	3	945	6 x 3.6	64.8	2060	3170	4290	5400	7630	9860
			6 x 4.8	86.4	2430	3920	5400	6890	9860	12830
			6 x 6.0	108.0	2800	4660	6520	8380	12090	15810
	4	1260	6 x 3.6	86.4	2750	4230	5720	7200	10180	13150
			6 x 4.8	115.2	3240	5220	7200	9190	13150	17110
			6 x 6.0	144.0	3740	6210	8690	11170	16120	21070
	5	1575	6 x 3.6	108.0	3430	5290	7150	9010	12720	16440
			6 x 4.8	144.0	4050	6530	9010	11480	16440	21390
			6 x 6.0	180.0	4670	7770	10860	13960	20150	26340
	6	1890	6 x 3.6	129.6	4120	6350	8580	10810	15260	19720
			6 x 4.8	172.8	4860	7830	10810	13780	19720	25670
			6 x 6.0	216.0	5610	9320	13040	16750	24180	31610

Model	No. of Units in Parallel	Initial Delivery (Litres)	Heating Elements (kW)	Total Kilowatts	Available Litres of Hot Water at 65°C Temperature Rise Over Peak Period					
					1 Hour	2 Hours	3 Hours	4 Hours	6 Hours	8 Hours
A613 050	1	50	3 x 3.6	10.8	190	340	480	620	910	1190
			3 x 4.8	14.4	240	430	620	810	1190	1570
A613 315	1	315	3 x 3.6	10.8	460	600	740	890	1170	1460
			3 x 4.8	14.4	510	700	890	1080	1460	1840
			3 x 6.0	18.0	550	790	1030	1270	1740	2220
	2	630	3 x 3.6	21.6	920	1200	1490	1770	2340	2920
			3 x 4.8	28.8	1010	1390	1770	2150	2920	3680
			3 x 6.0	36.0	1110	1580	2060	2540	3490	4440
	3	945	3 x 3.6	32.4	1370	1800	2230	2660	3520	4370
			3 x 4.8	43.2	1520	2090	2660	3230	4370	5520
			3 x 6.0	54.0	1660	2370	3090	3800	5230	6660
A616 315	1	315	6 x 3.6	21.6	600	890	1170	1460	2030	2600
			6 x 4.8	28.8	700	1080	1460	1840	2600	3360
			6 x 6.0	36.0	790	1270	1740	2220	3170	4130
	2	630	6 x 3.6	43.2	1200	1770	2340	2920	4060	5200
			6 x 4.8	57.6	1390	2150	2920	3680	5200	6730
			6 x 6.0	72.0	1580	2540	3490	4440	6350	8250
	3	945	6 x 3.6	64.8	1800	2660	3520	4370	6090	7800
			6 x 4.8	86.4	2090	3230	4370	5520	7800	10090
			6 x 6.0	108.0	2370	3800	5230	6660	9520	12380

Note: Figures rounded to the nearest 10 litres.