

CHRE



Centrifugal roof fans with low noise level

Centrifugal roof fans with low noise level and external rotor motor.



Fan:

- Sheet steel base plate.
- Impeller with backward-curved blades made from sheet steel
- Bird guard
- Sheet steel rain deflector hood with anticorrosive protection

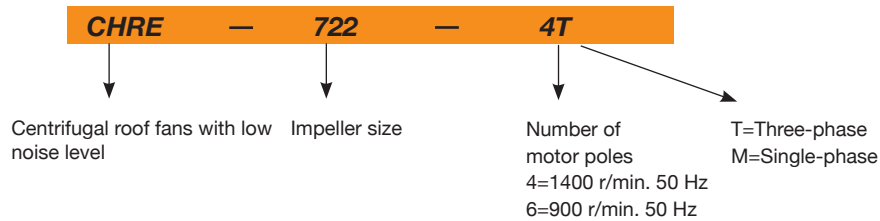
Motor:

- Class F external rotor motors, IP54 protection
- Single-phase 230V.-50Hz., and three-phase 230/400V.-50Hz.
- Max. air temperature to transport: -25°C + 50°C

Finish:

- Anticorrosive finish in polyester resin polymerised at 190°C, after alkaline degreasing with phosphate-free nanotechnology treatment.

Order code



Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)		Max. electric power (kW)	Maximum airflow (m³/h)	Sound pressure level ¹ at 2/3 of Qmax dB(A)		Approx. weight (Kg)
		230V	400V			Inlet	Outlet	
CHRE-722-4T	1360	0.31	0.18	0.06	650	31	37	7.6
CHRE-722-4M	1360	0.25		0.06	650	31	37	7.6
CHRE-825-4T	1360	0.52	0.30	0.08	950	32	38	9.1
CHRE-825-4M	1360	0.34		0.08	950	32	38	9.1
CHRE-1131-4T	1330	0.78	0.45	0.17	2000	39	45	14.1
CHRE-1131-4M	1330	0.70		0.16	2000	39	45	14.1
CHRE-1131-6T	910	0.43	0.25	0.07	1280	28	34	13.6
CHRE-1131-6M	910	0.35		0.08	1280	28	34	13.6
CHRE-1135-4T	1280	0.95	0.55	0.20	2500	43	48	19.1
CHRE-1135-4M	1280	0.85		0.20	2500	43	48	19.1
CHRE-1135-6T	880	0.52	0.30	0.11	1800	31	38	18.1
CHRE-1135-6M	880	0.50		0.12	1800	31	38	18.1
CHRE-1240-4T	1330	1.49	0.86	0.48	4000	46	52	24.8
CHRE-1240-4M	1330	2.10		0.48	4000	46	52	26.3
CHRE-1240-6M	860	0.70		0.16	2400	35	41	22.8
CHRE-1445-4T	1345	2.17	1.25	0.67	5400	53	59	36.0
CHRE-1445-4M	1345	2.80		0.64	5400	53	59	38.0
CHRE-1445-6T	920	1.13	0.65	0.28	3700	42	48	34.5
CHRE-1445-6M	920	1.10		0.26	3700	42	48	36.0
CHRE-1650-4T	1380	3.29	1.90	1.25	7600	57	62	40.5
CHRE-1650-4M	1380	5.80		1.33	7600	57	62	48.5
CHRE-1650-6T	900	1.40	0.81	0.66	5200	45	52	38.0
CHRE-1650-6M	900	3.00		0.69	5200	45	52	40.0

(1) The sound level values are measurements of pressure in dB(A) at a distance of 6 m and at 2/3 of the maximum airflow (2/3 Qmax.)



Erp. BEP (best efficiency point) characteristics

MC	Measurement category	ηe [%]	Efficiency
EC	Efficiency category	N	Degree of efficiency
S	Static	[kW]	Electrical power
T	Total	[m³/h]	Airflow
VSD	Variable-speed drive	[mmH₂O]	Static or total pressure (According to EC)
SR	Specific relationship	[RPM]	Speed

Model	MC	EC	VSD	SR	ηe [%]	N	[kW]	[m3/h]	[mmH₂O]	[RPM]
CHRE-722-4T	-	-	-	-	-	-	0.053	345	11.55	1368
CHRE-722-4M	-	-	-	-	-	-	0.057	348	11.32	1361
CHRE-825-4T	-	-	-	-	-	-	0.073	561	14.78	1367
CHRE-825-4M	-	-	-	-	-	-	0.078	567	14.49	1360
CHRE-1131-4T	C	S	NO	1.00	39.6%	58.5	0.160	1072	21.71	1352
CHRE-1131-4M	C	S	NO	1.00	41.7%	60.8	0.151	1083	21.33	1341
CHRE-1131-6T	-	-	-	-	-	-	0.074	712	9.40	920
CHRE-1131-6M	-	-	-	-	-	-	0.080	719	9.21	911
CHRE-1135-4T	C	S	NO	1.00	43.0%	60.9	0.196	1182	26.12	1286
CHRE-1135-4M	C	S	NO	1.00	42.4%	60.2	0.200	1191	26.04	1280
CHRE-1135-6T	-	-	-	-	-	-	0.108	909	13.19	885
CHRE-1135-6M	-	-	-	-	-	-	0.116	918	12.93	880
CHRE-1240-4T	C	S	NO	1.00	46.4%	60.4	0.461	1955	40.11	1347
CHRE-1240-4M	C	S	NO	1.00	45.3%	59.2	0.467	2081	37.27	1332
CHRE-1240-6M	-	-	-	-	-	-	0.120	1127	13.64	889
CHRE-1445-4T	C	S	NO	1.00	50.7%	63.0	0.668	3441	36.10	1355
CHRE-1445-4M	C	S	NO	1.00	50.5%	63.1	0.626	3364	34.49	1360
CHRE-1445-6T	C	S	NO	1.00	42.8%	59.9	0.237	2303	16.16	932
CHRE-1650-4T	C	S	NO	1.00	51.2%	60.7	1.246	4905	47.71	1380
CHRE-1650-4M	C	S	NO	1.00	50.9%	60.2	1.307	4976	49.10	1387
CHRE-1650-6T	C	S	NO	1.00	44.9%	59.4	0.414	3252	20.97	937
CHRE-1650-6M	C	S	NO	1.00	44.0%	58.5	0.416	3234	20.75	934

Best efficiency point data of the motor-impeller unit

Acoustic features

Values taken at inlet with 2/3 of the maximum airflow (2/3Qmax).

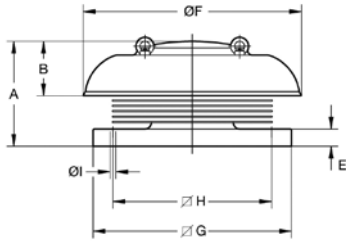
Values taken at outlet with 2/3 of the maximum airflow (2/3Qmax).

Model	Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.								Model	Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.							
	63	125	250	500	1000	2000	4000	8000		63	125	250	500	1000	2000	4000	8000
722	29	35	46	49	50	46	44	38	722	33	38	52	54	55	55	50	45
825	30	36	47	50	51	47	45	39	825	34	39	53	55	56	56	51	46
1131-4	40	49	54	54	58	57	50	44	1131-4	39	48	58	62	65	62	55	49
1131-6	29	38	43	43	47	46	39	33	1131-6	28	37	47	51	54	51	44	38
1135-4	44	53	58	58	62	61	54	48	1135-4	42	51	61	65	68	65	58	52
1135-6	32	41	46	46	50	49	42	36	1135-6	32	41	51	55	58	55	48	42
1240-4	48	54	60	60	63	66	57	51	1240-4	47	59	67	69	70	70	62	54
1240-6	37	43	49	49	52	55	46	40	1240-6	36	48	56	58	59	59	51	43
1445-4	55	61	67	67	70	73	64	58	1445-4	54	66	74	76	77	77	69	61
1445-6	44	50	56	56	59	62	53	47	1445-6	43	55	63	65	66	66	58	50
1650-4	60	67	72	72	76	75	68	63	1650-4	58	70	78	80	81	78	71	63
1650-6	48	55	60	60	64	63	56	51	1650-6	48	60	68	70	71	68	61	53

To obtain the Lwa sound power spectra in dB(A) at the inlet with the maximum airflow (Qmax), add the values in the following tables to the LpA sound pressure level given on the characteristic curves:

Frequency band in Hz							
63	125	250	500	1000	2000	4000	8000
2	9	15	15	18	18	11	5

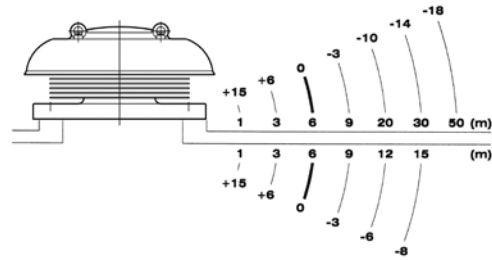
Dimensions in mm



Model	A	B	E	ØF	ØG	ØH	ØI
CHRE-722	194	110	30	440	355	295	12
CHRE-825	212	110	35	440	400	320	12
CHRE-1131	308	176	40	620	450	360	12
CHRE-1135	325	176	40	620	560	450	12
CHRE-1240	351	176	40	620	560	450	12
CHRE-1445	393	228	40	770	710	590	12
CHRE-1650	426	228	40	770	710	590	12

Variation of sound pressure depending on distance

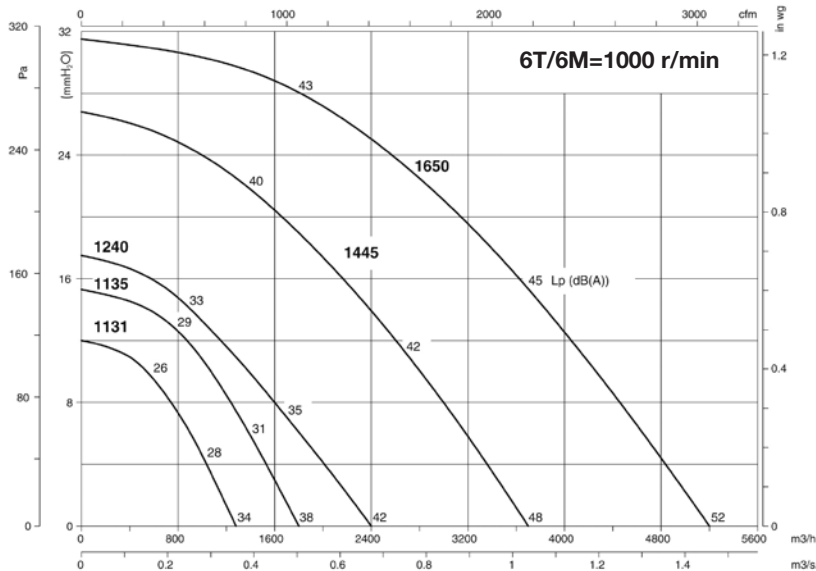
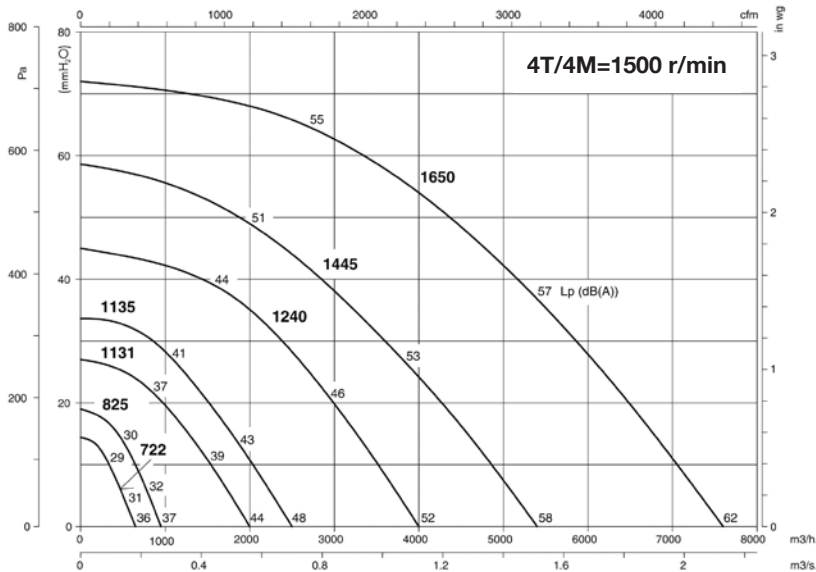
The sound level may vary depending on the roof structure.



Characteristic Curves

Q = Airflow in m³/h, m³/s and cfm.
inwa.

Pe = Static pressure in mmH₂O, Pa and in wg.



Accessories

See accessories section

