

## ICQ Series - square centrifugal



product ICQ Series - square centrifugal		
dimensions mm 280 - 710	poles & duty 4 - 10 / up to 4,500 L/s	
application High performance centrifugal fans for medium to high pressure ducted systems.		

### ICQ Series

The ICQ series is a range of inline duct mounted fans for use in general ventilation systems. All models are built around high performance centrifugal impellers driven by totally enclosed fan cooled (TEFC) or external rotor motors (ERM). Note that single phase ICQ series fans are only available in ERM models.

### Construction

Cases are fabricated from galvanised sheet steel with standard duct flanges for easy installation. Impellers are high efficiency backward curve centrifugal type. The impeller and motor assembly is supported by a robust galvanised steel frame for long, trouble free service.

### Motors

Motors are of TEFC or ERM design. Motor enclosure feature minimum IP54 protection as standard with higher ratings are available on request. Motor windings incorporate class 'F' insulation as standard although class 'H' is readily available. Motor bearings are sealed for life and maintenance.

### Features

High reliability TEFC or ERM motors with sealed for life bearings.  
Class 'H' available across all sizes.  
EXE, EXD, motors available across the range.  
High performance backward curve centrifugal impellers.  
Perfectly suited to medium/high volume and pressure applications.  
Fully speed controllable.  
Fans can be mounted at any angle.

### Testing

Rated fan performance has been determined by testing to ISO 5801 : 2007.  
Fan sound data has been determined by testing to ISO 13347 : 2004.

### Wiring diagrams and latest data

Refer to the latest product datasheet for individual model wiring instructions, data and specifications. Datasheets are available from our electronic selection software **FansSelect** downloadable at [www.pacificHVAC.com](http://www.pacificHVAC.com)

It is a condition of our warranty that all equipment supplied is installed according to the requirements of AS/NZS3000:2007 Australian/New Zealand wiring rules.

### Suggested Specification

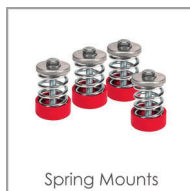
Centrifugal Flow duct mounted type fans shall be of the ICQ Series manufactured by Pacific HVAC Engineering. Backward Curved Centrifugal impellers shall be driven by TEFC motors with sealed for life bearings. Cases incorporating standardized flanges to be of galvanised sheet steel with cross breaks in larger sizes for added strength and noise minimisation. All fans shall be fully tested in accordance with the requirements of ISO 5801 : 2007 for air flow and ISO 13347 : 2004 for sound.

## ICQ Series - square centrifugal

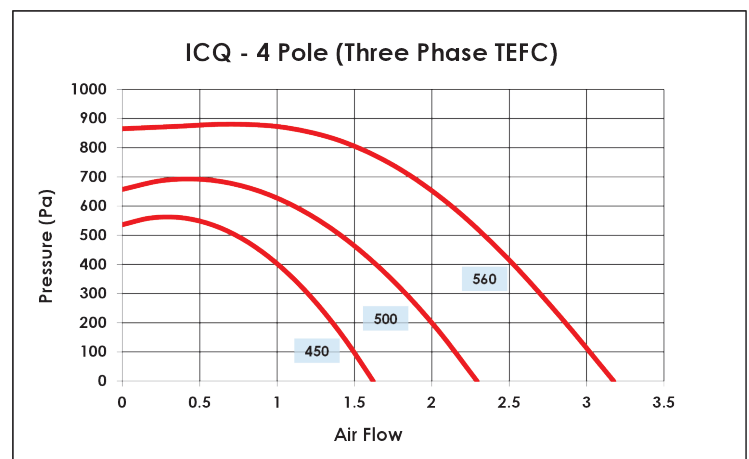
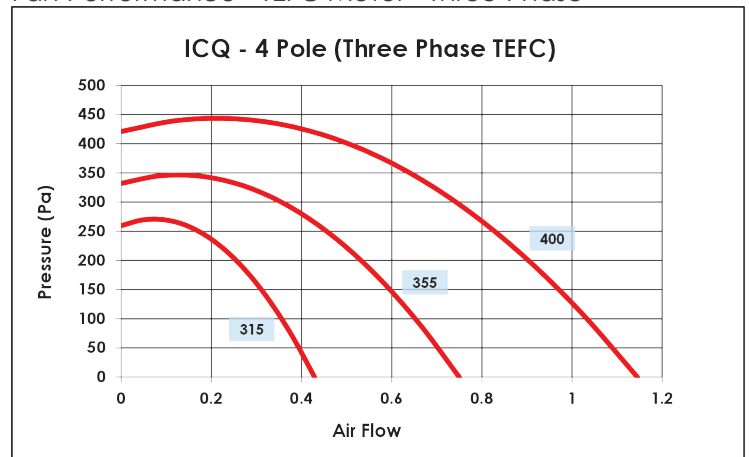
### Fan Data - TEFC Motor (All Three Phase)

Fan Model	Full Load Current	Motor kW	Shaft Revs /sec	dB(A)@3m	SPL dB referred to 10 <sup>-12</sup> W Type D: ducted inlet/outlet (LW)							
					63	125	250	500	1K	2K	4K	8K
ICQ315-4DD	1.26	0.55	24	46	77	75	69	66	59	55	54	51
ICQ315-6DD	0.99	0.37	16	40	67	69	60	60	54	51	46	42
ICQ355-4DD	1.26	0.55	24	51	75	78	72	71	61	63	59	52
ICQ355-6DD	0.99	0.37	16	43	65	69	64	63	58	51	46	44
ICQ400-4DD	1.26	0.55	24	54	79	81	75	73	66	66	65	58
ICQ400-6DD	0.99	0.37	16	44	70	72	67	63	58	55	52	47
ICQ400-8DD	1.23	0.37	12	37	63	65	60	56	51	48	45	40
ICQ450-4DD	1.7	0.75	24	56	78	81	77	75	69	69	67	63
ICQ450-6DD	0.99	0.37	16	44	74	75	68	65	59	58	55	50
ICQ450-8DD	1.23	0.37	12	39	67	68	61	58	52	51	48	43
ICQ500-4DD	2.37	1.1	24	60	81	85	81	76	74	74	69	71
ICQ500-6DD	0.99	0.37	16	50	74	80	72	66	63	61	58	55
ICQ500-8DD	1.23	0.37	12	43	67	73	65	59	56	54	51	48
ICQ560-4DD	4.38	2.2	24	65	86	93	88	80	78	78	73	72
ICQ560-6DD	1.66	0.55	16	53	78	82	75	70	66	66	62	61
ICQ560-8DD	1.23	0.37	12	44	70	72	66	60	58	56	55	50
ICQ630-4DD	7.68	4	24	68	83	97	90	81	84	81	78	75
ICQ630-6DD	2.62	1.1	16	57	74	87	81	71	74	71	68	66
ICQ630-8DD	1.71	0.55	12	51	68	81	75	65	68	65	62	60
ICQ710-6DD	4.83	2.2	16	61	85	90	86	75	73	71	70	68
ICQ710-8DD	2.91	1.1	12	47	72	75	72	61	61	57	56	53
ICQ710-1DD	2.91	0.917	10	42	67	70	67	56	56	52	51	48

### Ancillaries

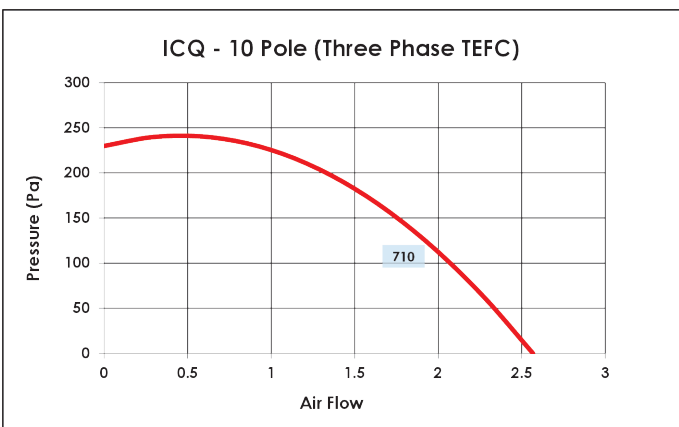
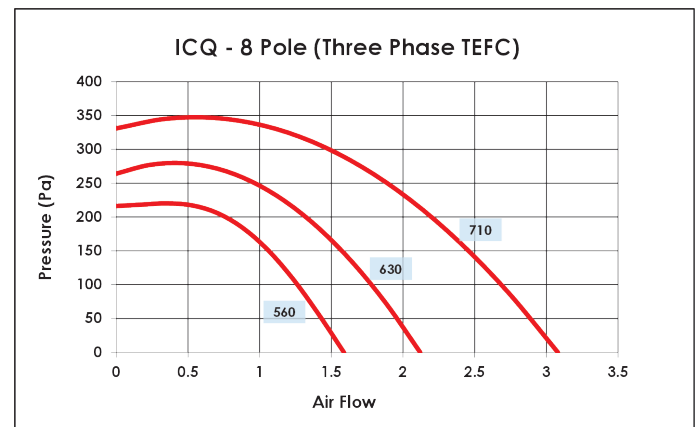
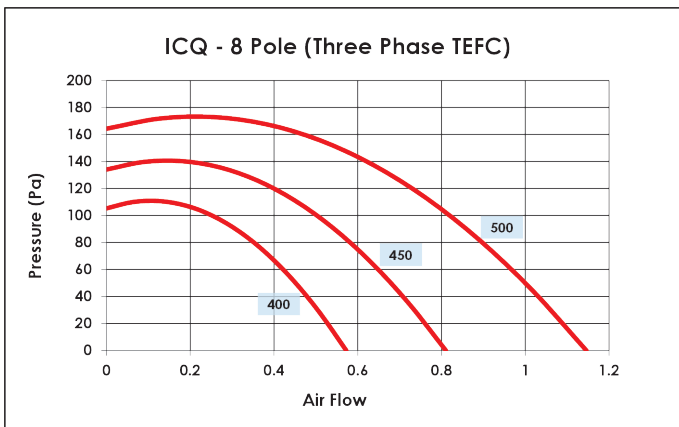
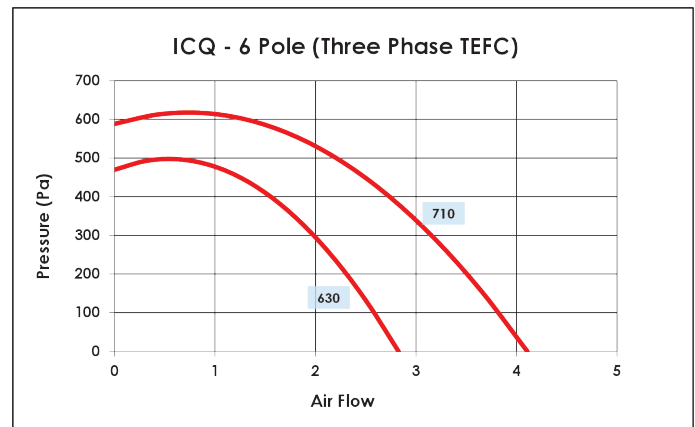
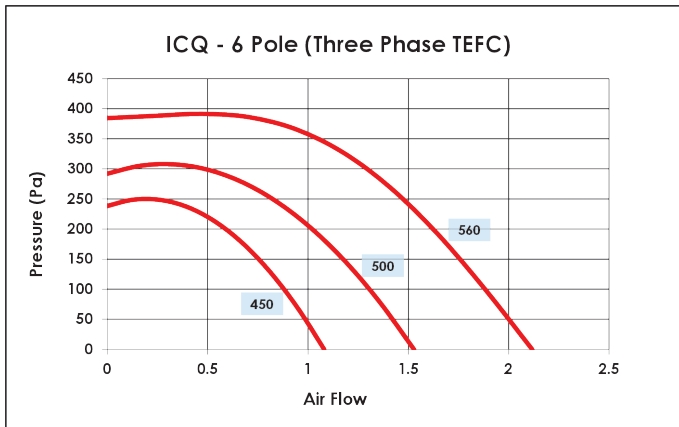
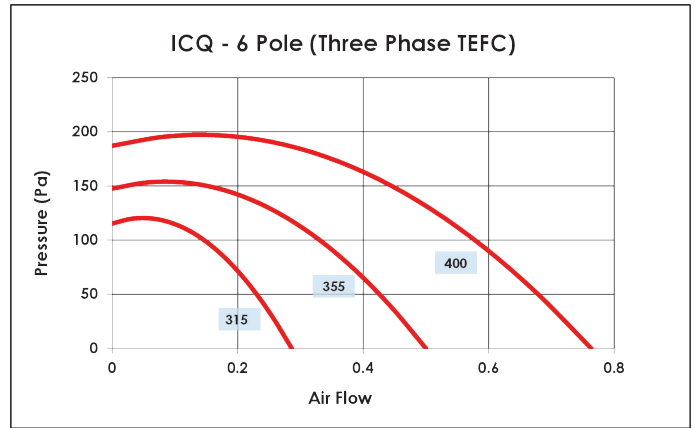
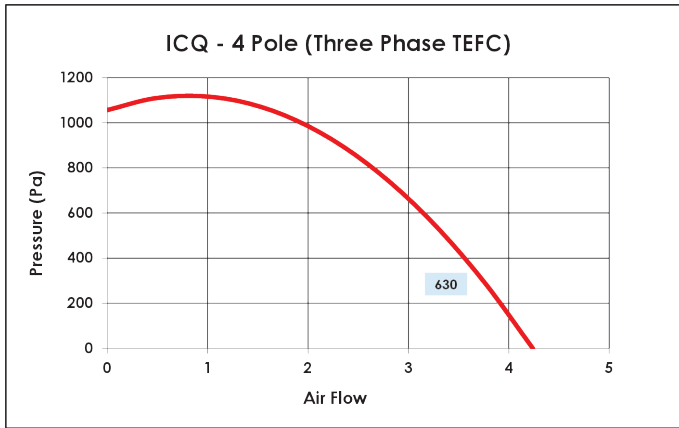


### Fan Performance - TEFC Motor - Three Phase



## ICQ Series - square centrifugal

Fan Performance - TEFC Motor - Three Phase

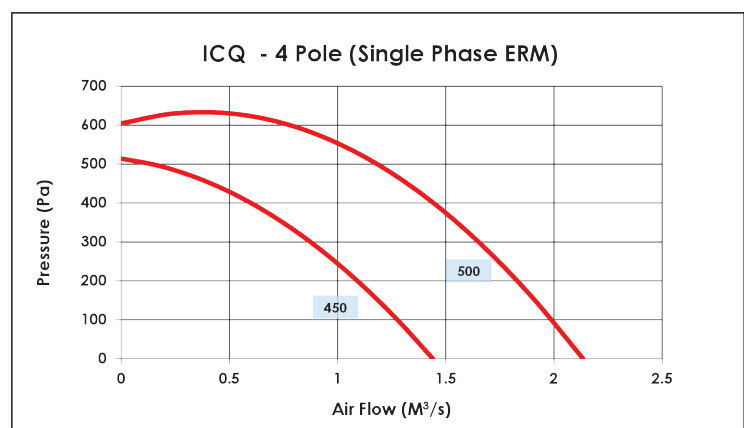
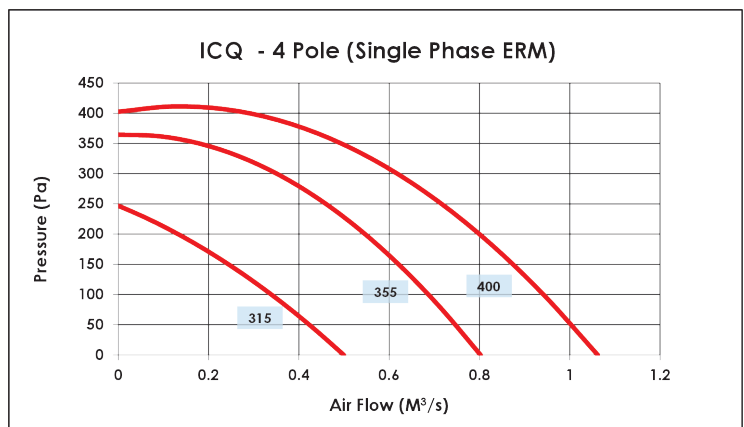
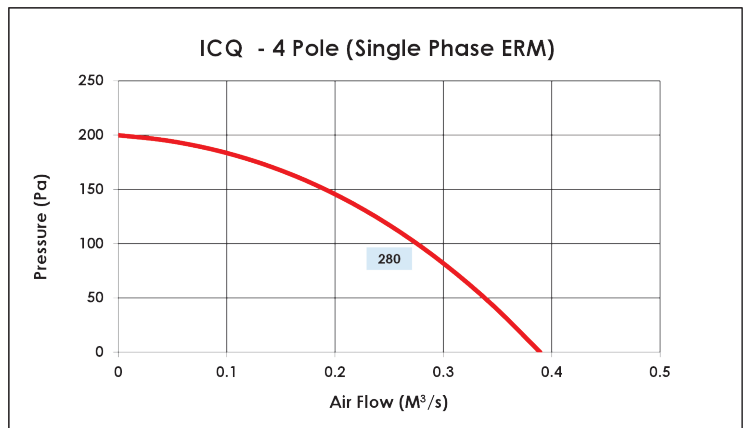


## ICQ Series - square centrifugal

### Fan Data - ERM - Single Phase

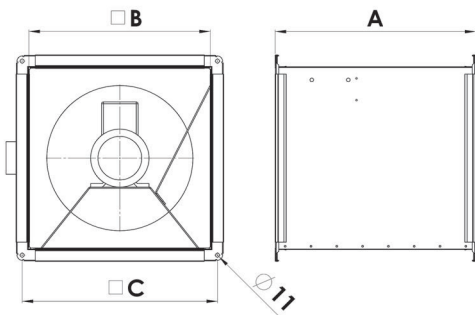
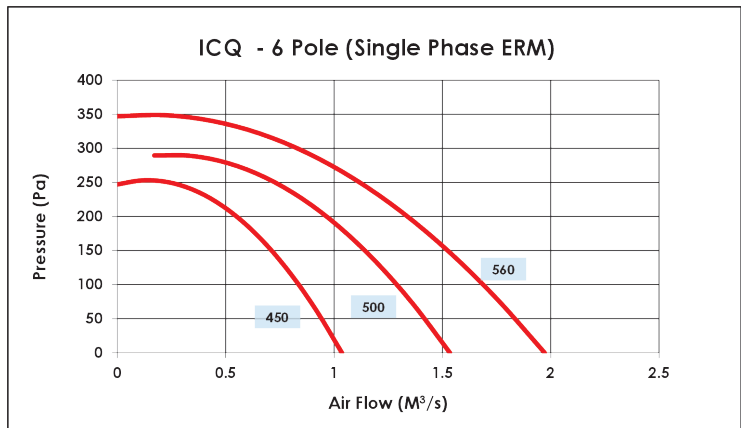
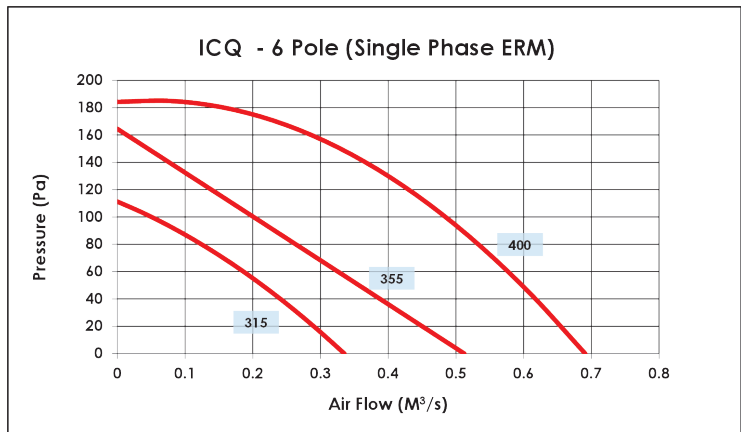
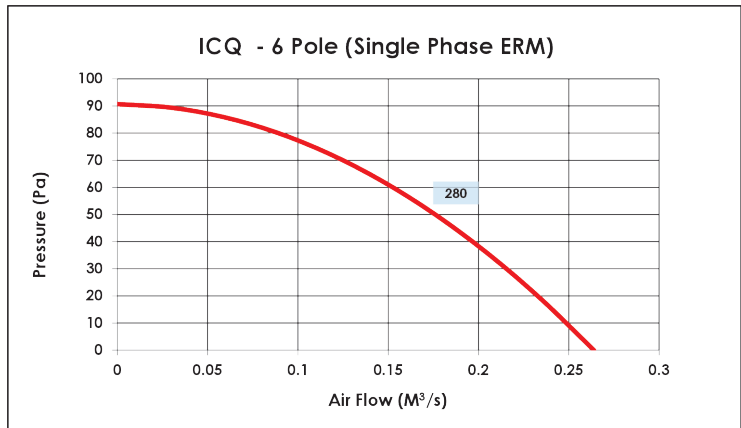
Fan Model	RPM	Voltage	Amps	kW	SPL dB referred to 10 <sup>-12</sup> W Type C: ducted inlet, free out.								
					63	125	250	500	1K	2K	4K	8K	dB(A)@3m
ICQ280-4EE	1420	240	0.35	0.078	75	70	67	62	55	52	51	48	43
ICQ280-6EE	960	240	0.35	0.038	67	62	60	54	47	44	43	40	35
ICQ315-4EE	1430	240	0.5	0.115	71	70	65	66	58	53	49	47	45
ICQ315-6EE	960	240	0.5	0.06	67	65	59	60	53	47	43	41	39
ICQ355-4EE	1420	240	1.12	0.245	76	74	71	62	54	52	50	43	45
ICQ355-6EE	870	240	0.31	0.07	67	64	64	58	51	46	44	40	39
ICQ400-4EE	1370	240	2.4	0.48	71	76	73	67	63	57	57	53	49
ICQ400-6EE	895	240	0.68	0.155	63	68	65	59	55	49	49	45	41
ICQ450-4EE	1250	240	3	0.68	71	72	74	71	66	61	60	49	51
ICQ450-6EE	930	240	1.42	0.3	71	70	63	63	55	54	50	40	43
ICQ500-4EE	1375	240	5.2	1.43	73	77	77	74	71	67	64	59	55
ICQ500-6EE	905	240	2.2	0.5	65	69	69	66	63	59	56	51	47
ICQ560-6EE	885	240	4.35	0.78	64	69	66	66	63	56	55	52	47

### Fan Performance - ERM - Single Phase



## ICQ Series - square centrifugal

### Fan Performance - ERM - Single Phase



ICQ Size	A	B	C	kg
280	350	410	445	27
315	500	410	445	35
355	550	450	485	34
400	550	500	535	45
450	600	550	585	48
500	650	650	685	58
560	750	700	735	72
630	800	801	835	96
710	900	900	935	113

## ICQ Series - square centrifugal

### Fan Data - ERM - Three Phase

Fan Model	RPM	Voltage	Amps	kW	SPL dB referred to 10 <sup>-12</sup> W Type C: ducted inlet, free out.								
					63	125	250	500	1K	2K	4K	8K	dB(A)
ICQ315-4DE	1420	415	0.35	0.125	71	70	65	66	58	53	49	47	45
ICQ315-6DE	1250	415	0.15	0.085	67	65	59	60	53	47	43	41	39
ICQ355-4DE	1400	415	0.52	0.17	76	74	71	62	54	52	50	43	45
ICQ355-6DE	1200	415	0.22	0.13	68	65	65	59	52	47	45	41	40
ICQ400-4DE	1415	415	1.41	0.515	71	76	73	67	63	57	57	53	49
ICQ400-6DE	1235	415	0.7	0.385	63	68	65	59	55	49	49	45	41
ICQ450-4DE	1350	415	1.48	0.73	71	72	74	71	66	61	60	49	51
ICQ450-6DE	930	415	0.75	0.29	71	70	63	63	55	54	50	40	43
ICQ500-4DE	1380	415	2.8	1.45	73	77	77	74	71	67	64	59	55
ICQ500-6DE	915	415	1.2	0.52	65	69	69	66	63	59	56	51	47
ICQ560-4DE	1350	415	4.7	2.41	76	81	78	78	75	68	67	64	59
ICQ560-6DE	890	415	1.68	0.78	64	69	66	66	63	56	55	52	47
ICQ630-4DE	1170	415	10.74	3.31	88	86	87	83	81	76	73	69	65
ICQ630-6DE	880	415	2.8	1.31	73	72	73	69	64	62	59	55	50

### Fan Performance - ERM - Three Phase

