



# Belgravia *eco*

FAN CONVECTORS

with EC Motors

Supreme, Classic and Tilevector models

## Belgravia *eco* Fan Convectors with EC Motors as standard

S & P Coil Products Ltd now offer EC motors as standard across the range of Belgravia fan convector units.

Due to their electronic commutation, EC motors offer significant energy savings compared to conventional AC motor driven fan convectors.

These energy savings occur across the range of rotational speeds and are particularly pronounced at low speeds where the efficiency of conventional AC motors decreases markedly.

Current building regulations specify maximum values for SFP (specific fan power). This is the ratio of the power drawn by the motor in Watts to the airflow generated in l/s and gives an indication of the efficiency of the air moving equipment.

To comply with Part L Building Regulations (2010) fan coil units currently need to demonstrate an SFP figure of less than 0.6 and ensuing revisions to the legislation are likely to significantly reduce this figure.

As part of SPC's commitment to energy saving, EC motors will be fitted to all future Belgravia fan convector units. The data shown overleaf covers the full range of Belgravia *eco* units and is valid for the Classic, Supreme and Tilevector models.

The air volumes achieved using the new EC motor have been matched to those previously offered on the AC range, accordingly the thermal outputs will remain unchanged. The table demonstrates the saving in SFP associated with the incorporation of EC technology.

## SPF and energy saving comparison of AC and DC motors in Belgravia Fan Convectors

Model	Size	Speed	Airflow (l/s)	AC power draw (W)	AC SFP (W/l/s)	EC power draw (W)	EC SFP (W/l/s)	% saving
Supreme & Classic	SPR30 BEL30	L	99	38	0.38	13	0.13	67
		M	124	43	0.35	20	0.16	54
		H	155	81	0.52	34	0.22	58
Supreme & Classic	SPR40 BEL40	L	89	38	0.43	11	0.12	72
		M	112	43	0.38	16	0.14	63
		H	140	81	0.58	27	0.19	67
Supreme & Classic	SPR60 BEL60	L	108	79	0.73	15	0.14	81
		M	184	99	0.54	53	0.29	46
		H	223	118	0.53	84	0.38	29
Supreme & Classic	SPR75 BEL75	L	110	79	0.72	19	0.17	76
		M	189	98	0.52	23	0.12	76
		H	280	149	0.53	53	0.19	64
Supreme & Classic	SPR90 BEL90	L	120	79	0.66	18	0.15	77
		M	231	98	0.42	34	0.15	65
		H	317	149	0.47	73	0.23	51
Supreme & Classic	SPR115 BEL115	L	128	82	0.64	18	0.14	78
		M	188	98	0.52	23	0.12	76
		H	248	145	0.58	40	0.16	73
Supreme & Classic	SPR150 BEL150	L	180	98	0.54	22	0.12	78
		M	289	123	0.43	58	0.20	53
		H	329	145	0.44	80	0.24	45
Tilevector	Solo	L	70	30	0.43	12	0.17	60
		M	85	33	0.39	14	0.16	58
		H	95	40	0.42	18	0.19	55
Tilevector	Duo	L	140	60	0.43	24	0.17	60
		M	170	66	0.39	28	0.16	58
		H	190	80	0.42	36	0.19	55

SPC fan convectors equipped with EC motors are wired in such a way that all the speed control and switching features available on the familiar AC models are available for the new EC motors.

The incorporation of EC technology also allows the use of safe low voltages for remote thermostats and switches. This offers the possibility of replacement of mains switching associated with conventional fan convector motors and controls.

EC motorplates are interchangeable with existing units, offering a refurbishment option for requirements where energy saving motors are required.

Using ebm-papst EC technology

