QUIETFLOW TWIN SQTDCV

Centrifugal Twin Box Fan

QUIETFLOW TWIN SQTDCV

Product Overview

- 7 standard sizes from 125mm to 500mm
- Air volume flow rates up to 1.819 m³/s
- Static pressures up to 1029 Pa
- Suitable for operating temperatures up to +60°C
- Available in **EC**

Acoustically lined twin in-line centrifugal fans with demand control. Designed to monitor and control one or more fan units simultaneously, with 6 pre-programmed fan applications. Supplied Multi-function remote control panel with LCD display.

Low Noise
Each unit is acoustically lined internally with Class O rated (BS 476 Parts 6 and 7) fire resistant acoustic foam lining minimising breakout noise levels.

Easy Installation
New multi-mount brackets allow easy mounting in a range of orientations.

Easy Commissioning
Minimum and maximum ventilation rates as well as control settings can all be setup easily via the wall display provided. Settings can be loaded from one display copying settings between units quickly.

Space saving
Twin fan arrangement allows duty share and run and standby from one ventilation unit saving space compared to two separate units.

Efficient Performance
High efficiency low tonal noise backward curved centrifugal impellers are directly driven by EC external rotor motors, provide low specific fan powers and stepless speed control without tonal noise generation.

Weather Resistance
Units can be weatherproofed in the factory to allow external installation.

Controllability
Advanced control features from the Demand Control Ventilation or DCV, provide an effective, efficient control to meet variable occupancy. This optimises the indoor air quality and energy use of the ventilation system. Available control, humidity, temperature, presence, CO_2 and constant pressure.

Twin Fan Operation
Allowing control for auto changeover and duty share.

Warranty
Each SQTDCV has a 12 month warranty.

Construction
Constructed from a robust 1.2mm galvanised mild steel sheet casing. Each casing provides spigots to suit standard circular ducting. A removable lid is provided as standard to allow easy maintenance and cleaning.

Motors
Units have EC external rotor motors fitted as standard. The motors contain sealed for life bearings. Thermal Class of motors to THCL 130 or 155 dependent on size. All motors are suitable for use in ambient air conditions up to +60°C.

Impellers
High efficiency low tonal noise backward curved centrifugal impellers, dynamically balanced to ISO 14694 Grade G6.3 and directly driven by the motors to provide a smooth airflow through the unit.

Contents

Product Coding

Code	Reference
SQTDCV	Product Range
125	Diameter (125/150/200...)
–	
1	Voltage Supply (Single Phase / Three Phase)
EC	Motor Type (AC/EC)
A - Z	Additional Coding (A - Z) Product Variants
e.g.	SQTDCV125 / 1ECL

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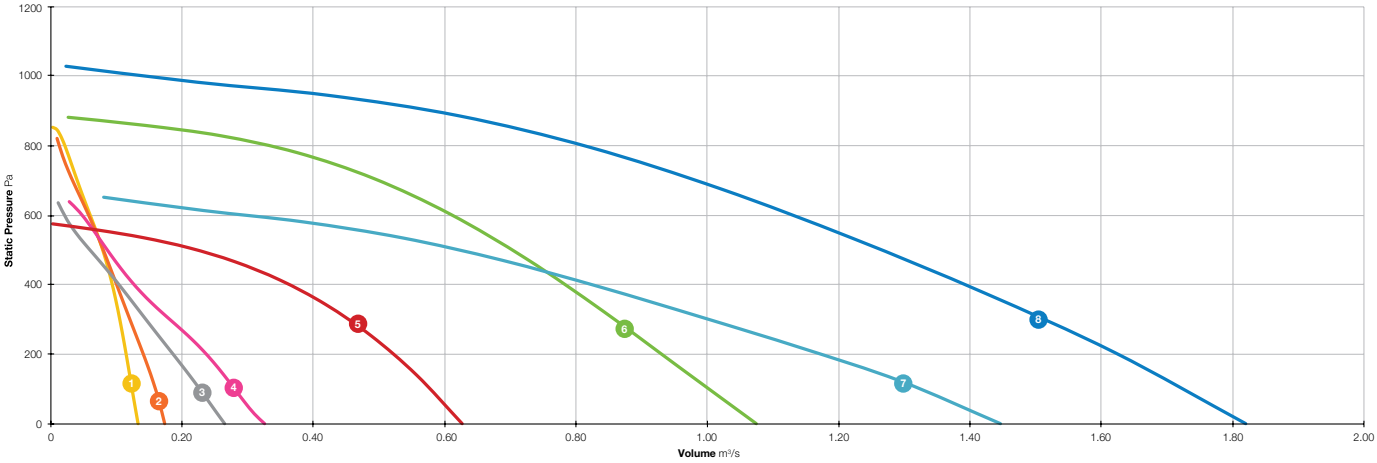
QUIETFLOW TWIN SQTDCV

EC

Performance Range Curves



1 SQTDCV125 / 1ECL
2 SQTDCV150 / 1ECL
3 SQTDCV200 / 1ECL
4 SQTDCV250 / 1ECL
5 SQTDCV315 / 1ECL
6 SQTDCV400 / 1ECL
7 SQTDCV500 / 1ECL
8 SQTDCV500 / 3ECL

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QUIETFLOW TWIN SQTDCV

Performance, SFP & Electrical Data

EC

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data	dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	Input kW	Peak Amps		
SQTDCV125-1ECL	10	4345	**m³/s**	**0.132**	**0.130**	**0.127**	**0.125**	**0.123**	**0.118**	**0.114**	**0.109**	**0.104**	**0.099**	**0.093**	**0.078**	26.8	0.168	1.41	Inlet	50
			W/(L/s)	1.26	1.28	1.31	1.33	1.35	1.40	1.46	1.52	1.60	1.68	1.79	2.13				Outlet	52
																			Breakout	42
	8	4185	**m³/s**	**0.118**	**0.115**	**0.113**	**0.110**	**0.108**	**0.103**	**0.099**	**0.094**	**0.089**	**0.083**	**0.076**	**0.055**	22.3	0.159	1.34	Inlet	48
			W/(L/s)	1.34	1.37	1.40	1.43	1.46	1.53	1.60	1.68	1.79	1.91	2.07	2.81				Outlet	48
																			Breakout	42
	5	2505	**m³/s**	**0.070**	**0.066**	**0.062**	**0.058**	**0.053**	**0.039**	**0.012**	-	-	-	-	-	21.0	0.034	0.34	Inlet	40
			W/(L/s)	0.49	0.52	0.55	0.60	0.65	0.85	2.40	-	-	-	-	-				Outlet	38
																			Breakout	42
	2	805	**m³/s**	**0.022**	-	-	-	-	-	-	-	-	-	-	-	4.2	0.004	0.06	Inlet	-
			W/(L/s)	0.20	-	-	-	-	-	-	-	-	-	-	-				Outlet	-
																			Breakout	-
SQTDCV150-1ECL	10	3840	**m³/s**	**0.174**	**0.170**	**0.167**	**0.163**	**0.159**	**0.151**	**0.141**	**0.131**	**0.121**	**0.110**	**0.100**	**0.080**	27.5	0.170	1.28	Inlet	50
			W/(L/s)	0.97	0.99	1.01	1.04	1.06	1.13	1.20	1.30	1.41	1.53	1.68	2.11				Outlet	50
																			Breakout	43
	8	3820	**m³/s**	**0.169**	**0.166**	**0.163**	**0.159**	**0.155**	**0.147**	**0.138**	**0.128**	**0.119**	**0.108**	**0.098**	**0.075**	27.0	0.167	1.27	Inlet	47
			W/(L/s)	0.93	0.95	0.97	0.99	1.02	1.08	1.17	1.27	1.39	1.53	1.70	2.19				Outlet	50
																			Breakout	43
	5	2260	**m³/s**	**0.103**	**0.094**	**0.087**	**0.080**	**0.073**	**0.058**	**0.034**	-	-	-	-	-	26.6	0.039	0.29	Inlet	38
			W/(L/s)	0.38	0.39	0.43	0.47	0.53	0.67	1.08	-	-	-	-	-				Outlet	43
																			Breakout	43
	2	725	**m³/s**	**0.031**	-	-	-	-	-	-	-	-	-	-	-	0.0	0.001	0.32	Inlet	-
			W/(L/s)	0.12	-	-	-	-	-	-	-	-	-	-	-				Outlet	-
																			Breakout	-
SQTDCV200-1ECL	10	3235	**m³/s**	**0.264**	**0.254**	**0.245**	**0.235**	**0.226**	**0.206**	**0.185**	**0.165**	**0.144**	**0.124**	**0.103**	**0.059**	29.2	0.171	1.64	Inlet	54
			W/(L/s)	0.65	0.67	0.70	0.72	0.76	0.83	0.92	1.03	1.18	1.37	1.65	2.87				Outlet	54
																			Breakout	48
	8	2960	**m³/s**	**0.226**	**0.219**	**0.211**	**0.204**	**0.196**	**0.178**	**0.158**	**0.134**	**0.108**	**0.083**	**0.061**		29.0	0.134	1.31	Inlet	50
			W/(L/s)	0.51	0.54	0.57	0.60	0.63	0.72	0.83	0.99	1.23	1.56	2.06					Outlet	51
																			Breakout	45
	5	1765	**m³/s**	**0.134**	**0.119**	**0.104**	**0.087**	**0.065**	-	-	-	-	-	-	-	24.6	0.033	0.34	Inlet	40
			W/(L/s)	0.21	0.25	0.30	0.37	0.49	-	-	-	-	-	-	-				Outlet	41
																			Breakout	35
	2	565	**m³/s**	**0.040**	-	-	-	-	-	-	-	-	-	-	-	3.1	0.004	0.06	Inlet	-
			W/(L/s)	0.10	-	-	-	-	-	-	-	-	-	-	-				Outlet	-
																			Breakout	-

Data provided is at standard air density of 1.2 kg/m³.
Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: D.
A variable speed drive is integrated within the fan.
Peak Amps @ 230V / 1PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

QUIETFLOW TWIN SQTDCV

EC

Performance, SFP & Electrical Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data	dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	Input kW	Peak Amps		
SQTDCV250-1ECL	10	2440	**m³/s**	**0.325**	**0.311**	**0.300**	**0.289**	**0.279**	**0.259**	**0.236**	**0.210**	**0.181**	**0.152**	**0.127**	**0.086**	36.4	0.170	1.64	Inlet	50
			W/(L/s)	0.52	0.55	0.57	0.59	0.61	0.66	0.72	0.81	0.94	1.12	1.34	1.97				Outlet	50
																			Breakout	44
	8	2445	**m³/s**	**0.327**	**0.315**	**0.303**	**0.292**	**0.282**	**0.260**	**0.237**	**0.213**	**0.186**	**0.158**	**0.129**	**0.073**	33.0	0.170	1.64	Inlet	47
			W/(L/s)	0.52	0.54	0.56	0.58	0.60	0.65	0.72	0.80	0.91	1.08	1.32	2.30				Outlet	48
																			Breakout	42
	5	1550	**m³/s**	**0.201**	**0.174**	**0.154**	**0.136**	**0.119**	**0.078**	-	-	-	-	-	-	27.8	0.044	0.49	Inlet	36
			W/(L/s)	0.21	0.25	0.29	0.34	0.39	0.55	-	-	-	-	-	-				Outlet	35
																			Breakout	27
	2	495	**m³/s**	**0.061**	-	-	-	-	-	-	-	-	-	-	-	6.2	0.004	0.06	Inlet	20
			W/(L/s)	0.07	-	-	-	-	-	-	-	-	-	-	-				Outlet	20
																			Breakout	20
SQTDCV315-1ECL	10	2011	**m³/s**	**0.625**	**0.614**	**0.602**	**0.590**	**0.577**	**0.550**	**0.521**	**0.489**	**0.453**	**0.411**	**0.362**	**0.220**	40.7	0.428	1.96	Inlet	51
			W/(L/s)	0.61	0.63	0.65	0.67	0.69	0.74	0.79	0.85	0.92	0.99	1.10	1.55				Outlet	51
																			Breakout	47
	8	1600	**m³/s**	**0.493**	**0.480**	**0.465**	**0.450**	**0.434**	**0.397**	**0.352**	**0.294**	**0.207**	**0.038**	-	-	41.5	0.217	1.04	Inlet	43
			W/(L/s)	0.41	0.42	0.44	0.46	0.49	0.54	0.61	0.71	0.93	3.71	-	-				Outlet	43
																			Breakout	40
	5	967	**m³/s**	**0.296**	**0.272**	**0.243**	**0.207**	0.152	-	-	-	-	-	-	-	32.7	0.061	0.32	Inlet	36
			W/(L/s)	0.20	0.22	0.25	0.29	0.38	-	-	-	-	-	-	-				Outlet	32
																			Breakout	28
	2	329	**m³/s**	**0.097**	-	-	-	-	-	-	-	-	-	-	-	4.8	0.015	0.11	Inlet	20
			W/(L/s)	0.16	-	-	-	-	-	-	-	-	-	-	-				Outlet	20
																			Breakout	20
SQTDCV400-1ECL	10	2201	**m³/s**	**1.074**	**1.055**	**1.037**	**1.019**	**1.001**	**0.965**	**0.930**	**0.894**	**0.858**	**0.821**	**0.783**	**0.702**	45.8	0.914	4.25	Inlet	58
			W/(L/s)	0.80	0.82	0.83	0.85	0.87	0.90	0.94	0.98	1.02	1.07	1.12	1.25				Outlet	57
																			Breakout	53
	8	1769	**m³/s**	**0.844**	**0.819**	**0.795**	**0.772**	**0.751**	**0.709**	**0.668**	**0.626**	**0.582**	**0.535**	**0.481**	**0.317**	46.4	0.491	2.33	Inlet	51
			W/(L/s)	0.54	0.56	0.58	0.60	0.61	0.65	0.70	0.75	0.81	0.88	0.98	1.41				Outlet	52
																			Breakout	47
	5	1063	**m³/s**	**0.514**	**0.481**	**0.446**	**0.408**	**0.365**	**0.259**	**0.035**	-	-	-	-	-	36.3	0.139	0.64	Inlet	40
			W/(L/s)	0.24	0.27	0.29	0.32	0.36	0.49	2.70	-	-	-	-	-				Outlet	41
																			Breakout	34
	2	356	**m³/s**	**0.172**	-	-	-	-	-	-	-	-	-	-	-	21.1	0.034	0.20	Inlet	20
			W/(L/s)	0.04	-	-	-	-	-	-	-	-	-	-	-				Outlet	20
																			Breakout	20

Data provided is at standard air density of 1.2 kg/m³.
Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: D.
A variable speed drive is integrated within the fan.
Peak Amps @ 230V / 1PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

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QUIETFLOW TWIN SQTDCV

EC

Performance, SFP & Electrical Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data	dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	Input kW	Peak Amps		
SQTDCV500-1ECL	10	2201	**m³/s**	**1.445**	**1.419**	**1.390**	**1.359**	**1.325**	**1.252**	**1.172**	**1.088**	**1.001**	**0.914**	**0.823**	**0.621**	48.1	0.774	3.50	Inlet	51
			W/(L/s)	0.49	0.50	0.52	0.53	0.55	0.60	0.65	0.70	0.77	0.84	0.92	1.17				Outlet	51
																			Breakout	50
	8	1158	**m³/s**	**1.184**	**1.127**	**1.076**	**1.028**	**0.981**	**0.890**	**0.797**	**0.697**	**0.584**	**0.441**	**0.205**	-	50.0	0.435	1.99	Inlet	45
			W/(L/s)	0.33	0.34	0.36	0.38	0.40	0.45	0.50	0.58	0.69	0.90	1.72	-				Outlet	47
																			Breakout	44
	5	695	**m³/s**	**0.696**	**0.631**	**0.559**	**0.477**	**0.378**	-	-	-	-	-	-	-	42.2	0.109	0.52	Inlet	32
			W/(L/s)	0.14	0.16	0.19	0.22	0.28	-	-	-	-	-	-	-				Outlet	32
																			Breakout	30
	2	233	**m³/s**	**0.235**	-	-	-	-	-	-	-	-	-	-	-	39.0	0.005	0.19	Inlet	20
			W/(L/s)	0.02	-	-	-	-	-	-	-	-	-	-	-				Outlet	20
																			Breakout	20

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A variable speed drive is integrated within the fan.
Peak Amps @ 230V / 1PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

QUIETFLOW TWIN SQTDCV

EC

Performance, SFP & Electrical Data

Three Phase 380V to 480V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data	dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	Input kW	Peak Amps		
SQTDCV500-3ECL	10	1800	**m³/s**	**1.819**	**1.797**	**1.744**	**1.751**	**1.727**	**1.677**	**1.625**	**1.570**	**1.512**	**1.453**	**1.392**	**1.265**	50.6	1.482	2.29	Inlet	58
			W/(L/s)	0.76	0.77	0.79	0.80	0.82	0.85	0.88	0.92	0.97	1.01	1.06	1.17				Outlet	58
																			Breakout	56
	8	1451	**m³/s**	**1.480**	**1.443**	**1.407**	**1.373**	**1.340**	**1.274**	**1.208**	**1.141**	**1.072**	**0.997**	**0.916**	**0.710**	52.5	0.806	1.32	Inlet	51
			W/(L/s)	0.48	0.50	0.52	0.54	0.56	0.60	0.64	0.69	0.74	0.80	0.87	1.10				Outlet	52
																			Breakout	50
	5	871	**m³/s**	**0.875**	**0.827**	**0.775**	**0.719**	**0.656**	**0.505**	**0.292**	-	-	-	-	-	47.1	0.192	0.47	Inlet	37
			W/(L/s)	0.20	0.22	0.24	0.26	0.29	0.37	0.58	-	-	-	-	-				Outlet	38
																			Breakout	36
	2	292	**m³/s**	**0.304**	-	-	-	-	-	-	-	-	-	-	-	14.8	0.025	0.16	Inlet	20
			W/(L/s)	0.08	-	-	-	-	-	-	-	-	-	-	-				Outlet	20
																			Breakout	20

Data provided is at standard air density of 1.2 kg/m³.
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A variable speed drive is integrated within the fan.
Peak Amps @ 400V / 3PH / 50Hz.
The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

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QUIETFLOW TWIN SQTDCV

Sound Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SQTDCV125-1ECL	10	Inlet	82	74	74	71	58	52	47	49	83
		Outlet	80	75	78	70	64	53	49	49	83
		Breakout	54	58	64	62	57	51	43	40	68
	8	Inlet	76	74	73	68	54	50	45	46	80
		Outlet	77	73	73	69	58	50	47	46	80
		Breakout	54	58	64	62	57	51	43	40	68
	5	Inlet	64	67	68	57	41	40	33	29	72
		Outlet	67	64	66	52	44	38	34	29	71
		Breakout	54	58	64	62	57	51	43	40	68
SQTDCV150-1ECL	10	Inlet	85	74	73	71	58	54	51	52	86
		Outlet	84	77	75	69	62	54	52	53	85
		Breakout	59	60	66	63	57	51	46	45	69
	8	Inlet	73	72	72	67	55	52	48	49	78
		Outlet	80	76	77	67	59	51	50	50	83
		Breakout	59	60	66	63	57	51	46	45	69
	5	Inlet	66	65	64	57	43	42	39	31	70
		Outlet	70	68	72	54	47	41	42	36	75
		Breakout	59	60	66	63	57	51	46	45	69
SQTDCV200-1ECL	10	Inlet	80	77	79	75	63	59	56	55	84
		Outlet	87	83	79	73	64	58	55	55	89
		Breakout	63	66	70	69	62	57	50	41	74
	8	Inlet	77	73	74	70	59	55	53	51	80
		Outlet	83	80	76	70	60	55	53	52	85
		Breakout	61	64	69	65	59	53	47	39	72
	5	Inlet	64	67	65	60	46	44	40	38	71
		Outlet	73	72	68	55	45	42	39	35	76
		Breakout	49	59	59	55	46	42	35	29	63
SQTDCV250-1ECL	10	Inlet	78	73	75	70	59	54	53	51	81
		Outlet	79	75	77	67	60	57	53	51	82
		Breakout	60	63	71	63	56	49	42	37	73
	8	Inlet	75	70	73	66	55	49	48	47	78
		Outlet	76	73	76	62	56	52	49	47	80
		Breakout	58	60	69	60	52	44	37	33	70
	5	Inlet	67	67	58	55	43	37	38	28	70
		Outlet	67	68	57	50	44	39	38	32	71
		Breakout	47	55	50	48	39	32	24	20	57

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.

Tel **01384 275800** Fax **01384 275810** Email **info@eltafans.co.uk** Website **eltafans.com**

QUIETFLOW TWIN SQTDCV

Sound Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SQTDCV315-1ECL	10	Inlet	75	73	78	69	53	55	50	48	81
		Outlet	77	74	77	70	59	55	52	49	81
		Breakout	66	67	74	65	58	52	46	40	76
	8	Inlet	70	74	68	59	47	49	44	40	76
		Outlet	72	76	63	61	53	49	46	42	78
		Breakout	61	69	64	59	52	46	39	34	71
	5	Inlet	63	71	58	45	35	36	30	17	72
		Outlet	63	67	51	46	40	36	30	17	69
		Breakout	51	58	55	44	38	32	25	19	60
SQTDCV400-1ECL	10	Inlet	81	77	87	71	66	62	59	58	88
		Outlet	82	78	80	77	69	65	62	59	86
		Breakout	73	72	79	71	67	61	54	47	81
	8	Inlet	77	79	78	67	59	56	53	50	83
		Outlet	79	79	77	72	63	58	56	52	84
		Breakout	67	71	73	65	60	54	48	42	76
	5	Inlet	67	75	63	51	44	44	40	29	76
		Outlet	69	76	59	55	48	46	41	33	77
		Breakout	58	65	58	50	46	42	35	28	67
SQTDCV500-1ECL	10	Inlet	77	84	75	64	59	57	53	52	85
		Outlet	78	82	73	71	62	57	54	50	84
		Breakout	73	79	73	69	61	54	47	42	81
	8	Inlet	74	77	71	59	53	50	48	48	79
		Outlet	75	80	67	65	56	51	49	44	81
		Breakout	69	75	67	63	56	48	41	37	77
	5	Inlet	71	63	58	45	38	37	35	26	72
		Outlet	72	62	53	51	41	37	34	25	72
		Breakout	64	59	54	49	42	35	24	21	66

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.

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Confirmation of dimensions and data will be supplied on request.

QUIETFLOW TWIN SQTDCV

Sound Data

Three Phase 380V to 480V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SQTDCV500-3ECL	10	Inlet	81	84	86	72	66	65	62	56	89
		Outlet	82	83	83	77	69	65	62	56	88
		Breakout	77	80	81	75	68	61	54	49	85
	8	Inlet	77	84	76	65	59	57	52	51	85
		Outlet	78	82	74	71	62	57	55	50	84
		Breakout	73	78	74	69	61	54	48	43	81
	5	Inlet	72	68	63	51	44	46	41	35	74
		Outlet	73	69	59	56	47	44	41	32	75
		Breakout	65	64	60	55	47	43	36	29	68

Data provided at standard air density of 1.2 kg/m³.
Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
The Sound Power Level Spectra are in dB re-1pW.

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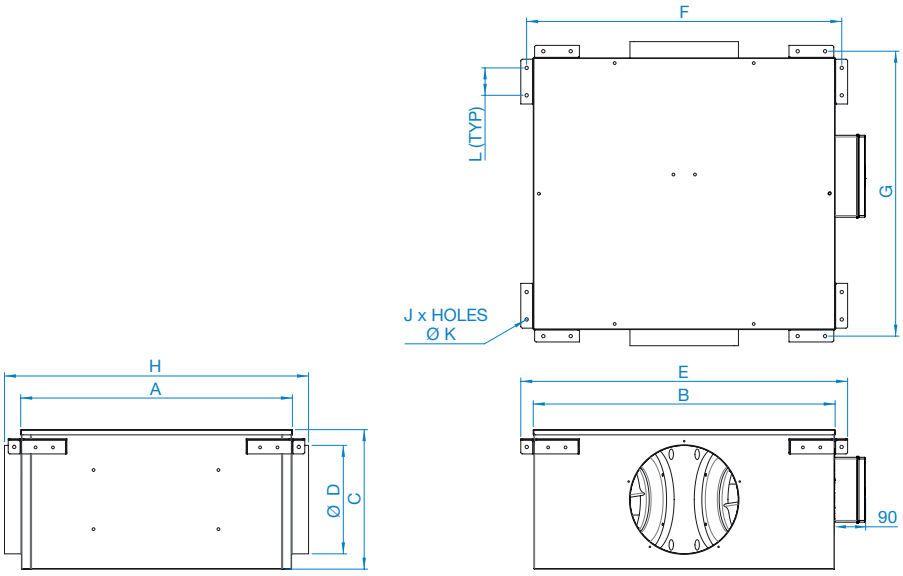
QUIETFLOW TWIN SQTDCV

Dimensional Data

Single & Three Phase

Product Code	A	B	C	D	E	F	G	H	J	K	Weight kg
SQTDCV125-1ECL	592	553	261	125	594	574	614	687	16	8	26
SQTDCV150-1ECL	592	553	261	150	594	574	614	687	16	8	26
SQTDCV200-1ECL	633	654	302	200	694	653	675	726	16	8	33
SQTDCV250-1ECL	633	654	332	250	694	653	675	726	16	8	34
SQTDCV315-1ECL	781	868	401	315	940	906	819	875	16	8	56
SQTDCV400-1ECL	883	1024	473	400	1094	1060	920	975	16	10	82
SQTDCV500-1ECL	1019	1258	602	500	1328	1294	1058	1113	16	10	128
SQTDCV500-3ECL	1019	1258	602	500	1328	1294	1058	1113	16	10	128



Dimensions are in mm.

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QUIETFLOW TWIN SQTDCV

EC

EcoDesign 1253/2014 - Information Requirements

REV2 01/05/2018

A	B	C*			D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S
		C.1	C.2	C.3															
Elta Fans Ltd	**SQTDCV125-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.040	0.034	n/a	3.26	145	n/a	21.0	<2.5	n/a	n/a	63	www.eltafans.com
Elta Fans Ltd	**SQTDCV150-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.060	0.039	n/a	3.40	158	n/a	26.6	<2.5	n/a	n/a	64	www.eltafans.com
Elta Fans Ltd	**SQTDCV200-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.080	0.033	n/a	2.55	87	n/a	24.6	<2.5	n/a	n/a	69	www.eltafans.com
Elta Fans Ltd	**SQTDCV250-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.180	0.170	n/a	3.67	300	n/a	36.4	<2.5	n/a	n/a	65	www.eltafans.com
Elta Fans Ltd	**SQTDCV315-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.359	0.397	n/a	4.6	404	n/a	40.7	<2.5	n/a	n/a	51	www.eltafans.com
Elta Fans Ltd	**SQTDCV400-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.608	0.874	n/a	4.84	603	n/a	45.8	<2.5	n/a	n/a	58	www.eltafans.com
Elta Fans Ltd	**SQTDCV500-1ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	0.768	0.753	n/a	3.91	430	n/a	48.1	<2.5	n/a	n/a	51	www.eltafans.com
Elta Fans Ltd	**SQTDCV500-3ECL**	NRVU	UVU	2018	Variable-Speed	None	n/a	1.007	1.466	n/a	5.13	685	n/a	50.6	<2.5	n/a	n/a	58	www.eltafans.com

A Manufacturer's Name
B Model Identifier
C.1 RVU or NRVU
C.2 UVU or BVU
C.3 ErP Compliance
D Type of Drive (MSD or VSD)
E Type of HRS (Run Around or Other or None)
F Thermal Efficiency (% or N/A)
G Nominal Flow Rate (m^3/s)
H Effective Electrical Power Input (kW)
I SFP Int ($W/m^3/s$)
J Face Velocity (m/s)
K Nominal External Pressure (Pa)
L Internal Pressure Drop of Ventilation Components (Pa)
N Static Efficiency of Fan Used 327/2011
O Maximum External Leakage Rate (%)
P Energy Classification of Filters
Q Description of Visual Filter warning
R Casing Sound Power Level (LWA)
S Website for Disassembly Instructions

* Declared Typology C

QUIETFLOW TWIN SQTDCV

Accessories

Single Phase

Product Code	Box Fan AV Mounts (set of 4)	Box Fan Flexible Connectors (each)	DCV LCD Display	Electric Heater Battery	Fast Clamps (each)	Panel Filter
SQTDCV125-1ECL	062-SEL03	018-0125-FLEX	149-DCV-MK3-CTRL	018-CV12-12-1M	018-125-CLAMP	018-0125-FILT-P
SQTDCV150-1ECL	062-SEL03	018-0150-FLEX	149-DCV-MK3-CTRL	018-CV15-27-1M	018-150-CLAMP	018-0150-FILT-P
SQTDCV200-1ECL	062-SEL03	018-0200-FLEX	149-DCV-MK3-CTRL	018-CV20-30-1M	018-200-CLAMP	018-0200-FILT-P
SQTDCV250-1ECL	062-SEL03	018-0250-FLEX	149-DCV-MK3-CTRL	018-CV25-30-1M	018-250-CLAMP	018-0250-FILT-P
SQTDCV315-1ECL	062-SEL03	018-0315-FLEX	149-DCV-MK3-CTRL	018-CV31-30-1M 018-CV31-45-1M 018-CV31-90-3M	018-315-CLAMP	018-0315-FILT-P
SQTDCV400-1ECL	062-SEL04	018-0400-FLEX	149-DCV-MK3-CTRL	018-CV40-90-3M 018-CV40-120-3E	018-400-CLAMP	018-0400-FILT-P
SQTDCV500-1ECL	062-SEL05	018-0500-FLEX	149-DCV-MK3-CTRL	-	018-500-CLAMP	018-0500-FILT-P

Product Code	Spigot Silencer 300mm Long	Spigot Silencer 600mm Long	Spigot Silencer 900mm Long	Spigot Silencer 1200mm Long	Wiring Diagram
SQTDCV125-1ECL	068-0125-JF1	068-0125-JF2	068-0125-JF3	068-0125-JF4	152-709
SQTDCV150-1ECL	068-0150-JF1	068-0150-JF2	068-0150-JF3	068-0150-JF4	152-709
SQTDCV200-1ECL	068-0200-JF1	068-0200-JF2	068-0200-JF3	068-0200-JF4	152-709
SQTDCV250-1ECL	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-709
SQTDCV315-1ECL	068-0315-JF1	068-0315-JF2	068-0315-JF3	068-0315-JF4	152-709
SQTDCV400-1ECL	068-0400-JF1	068-0400-JF2	068-0400-JF3	068-0400-JF4	152-709
SQTDCV500-1ECL	068-0500-JF1	068-0500-JF2	068-0500-JF3	068-0500-JF4	152-709

Three Phase

Product Code	Box Fan AV Mounts (set of 4)	Box Fan Flexible Connectors (each)	DCV LCD Display	Electric Heater Battery	Fast Clamps (each)	Panel Filter
SQTDCV500-3ECL	062-SEL05	018-0500-FLEX	149-DCV-MK3-CTRL	-	018-500-CLAMP	018-0500-FILT-P

Product Code	Spigot Silencer 300mm Long	Spigot Silencer 600mm Long	Spigot Silencer 900mm Long	Spigot Silencer 1200mm Long	Wiring Diagram
SQTDCV500-3ECL	068-0500-JF1	068-0500-JF2	068-0500-JF3	068-0500-JF4	152-709

DCV Accessories

DCV Accessories	CO_2 Transmitter	Humidity Transmitter	Presence Detector	Pressure Transmitter	Room Humidistat	Temperature Transmitter
All DCV products	149-DCV-CO2	149-DCV-HRT	149-DCV-PIR	149-DCV-DPT150	149-DCV-H1	149-DCV-TRT

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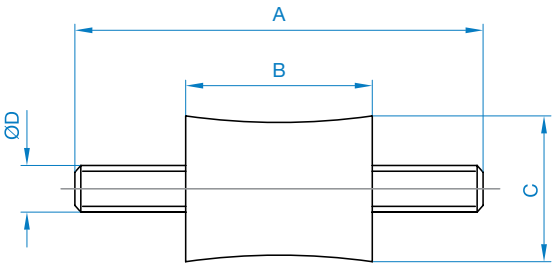
BOX FAN AV MOUNTS

Accessories

- Fits directly to fan
- Rubber with steel insert
- Supplied as set of 4 or 6, complete with fixings

Product Code	A	B	C	D	Weight kg
062-SEL03	70	32	25	M8	0.210
062-SEL04	60	20	25	M8	0.186
062-SEL05	60	20	25	M8	0.187



Dimensions are in mm.

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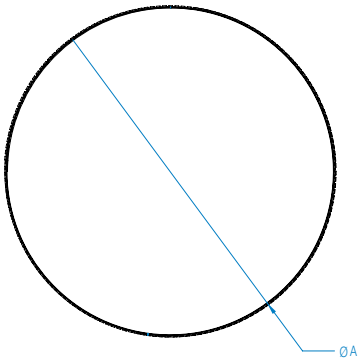
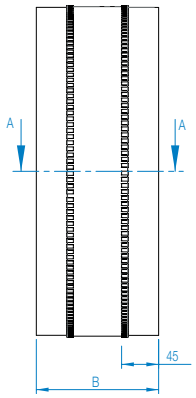
BOX FAN FLEXIBLE CONNECTOR

Accessories

- Fix directly on to spigot
- Provides flexible connection between fan and accessory or duct
- PVC coated polyester with galvanised sheet steel

Product Code	Fan Dia. A	B	Weight kg
018-0125-FLEX	125	150	0.2
018-0150-FLEX	150	150	0.2
018-0200-FLEX	200	150	0.3
018-0250-FLEX	250	150	0.4
018-0315-FLEX	315	150	0.5
018-0400-FLEX	400	150	0.7
018-0500-FLEX	500	150	1.0





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DCV LCD DISPLAY

Overview

- Multi-function remote control panel with LCD display
- Supplied as standard with DCV products
- Suitable for surface mounting

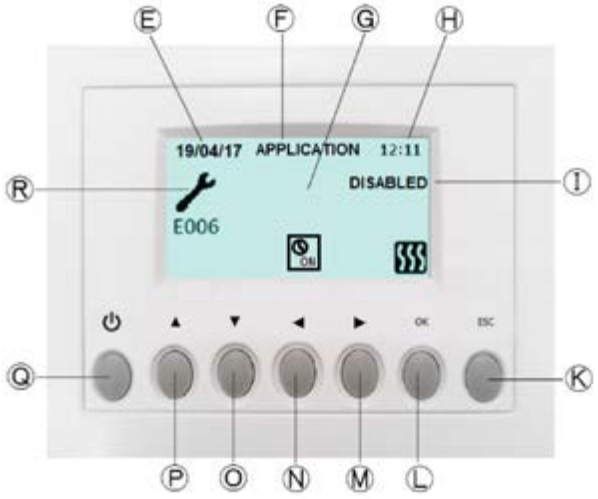
Programmable Control Functions

Product Code	Main Menu
149-DCV-MK3-CTRL	Language
	Date / Time
	P00: Fan Mode
	P01: Application
	P02: Sensor Range MIN
	P03: Sensor Range MAX
	P04: Setpoint
	P05: PID Control
	P06: Fixed Speed Value
	P07: Run On Time (minutes)
	P08: Min Fan Speed
	P09: Max Fan Sped
	P10: Slave Min Fan Speed
	P11: Slave Max Fan Speed
	P12: Temperature Input
	Weekly Timer
	Working Hours Counter
	Save Settings
	Load Settings
	Restore Default Settings
	Contrast
	Debug Page

Sensors

The DCV systems various sensors provide continuous real time feedback monitoring of the ambient air conditions through temperature, humidity, CO_2 or pressure in the occupied space.

When powered in auto mode, the CTRL-DSP displays as follows (Auto mode refers to applications 0-10V, Pressure CO_2, RH and Temperature).



E	DATE: shows the current date
F	APPLICATION: shows the current application
G	MODE: shows auto fan [all modes except manual] or manual position
H	TIME: shows the time
I	Remote Enable: shows remote enable is disabled
K	ESC key: to exit and go back to the previous menu
L	OK key: to enter the selected menu
N	Menu scroll LEFT
O	To go DOWN in menus
P	To go UP in menus
Q	On / Off: power the unit (hold for 5 seconds)
R	FAULT: shows error alarm, refer to error codes

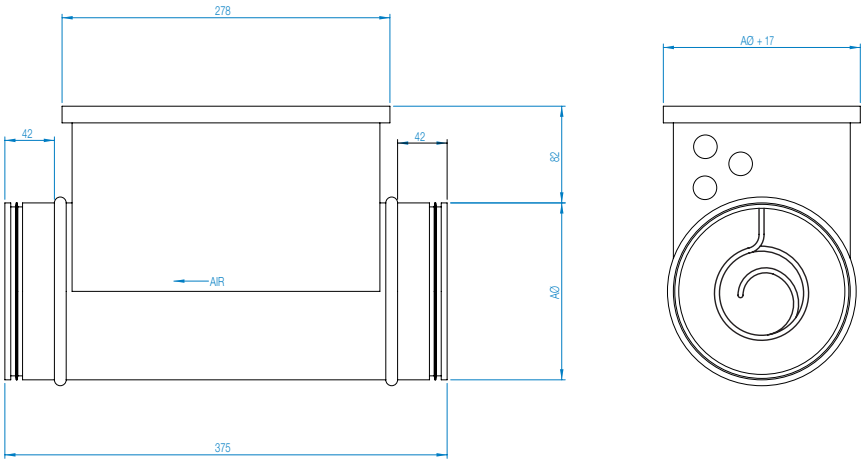
ELECTRIC HEATER BATTERY

Accessories

Type

CV – (E/M) duct heater with casing of Aluzinc-coated sheet steel and stainless steel heater element to EN 1.4301. The duct heaters conform to air tightness class C to EN 15727. Control takes place by an external regulator and sensor that must be ordered separately.

Product Code	kW	Phase	Airflow @ m³/s		A	Weight kg
			Min	Max		
018-CV12-12-1M	1.2	1	0.019	0.093	125	3.0
018-CV15-27-1M	2.7	1	0.031	0.208	150	4.2
018-CV20-30-1M	3.0	1	0.047	0.231	200	5.9
018-CV25-30-1M	3.0	1	0.075	0.231	250	7.8
018-CV31-30-1M	3.0	1	0.115	0.231	315	8.3
018-CV31-45-1M	4.5	1	0.115	0.347	315	8.3
018-CV31-90-3M	9.0	3	0.115	0.694	315	8.3



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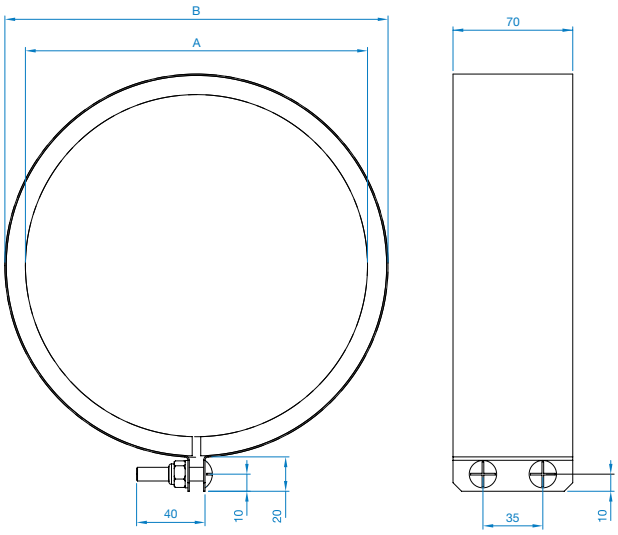
FAST CLAMPS

Accessories

- For quick connection of spigotted fans to circular duct or accessories
- Galvanised steel circular duct clamp with foam lining

Product Code	Fan Size	A Dia.	B Dia.	Weight kg
018-125-CLAMP	125	125	149	0.29
018-150-CLAMP	150	150	174	0.33
018-200-CLAMP	200	200	224	0.42
018-250-CLAMP	250	250	274	0.49
018-315-CLAMP	315	315	339	0.59
018-400-CLAMP	400	400	424	0.74
018-500-CLAMP	500	500	524	0.87



Dimensions are in mm.

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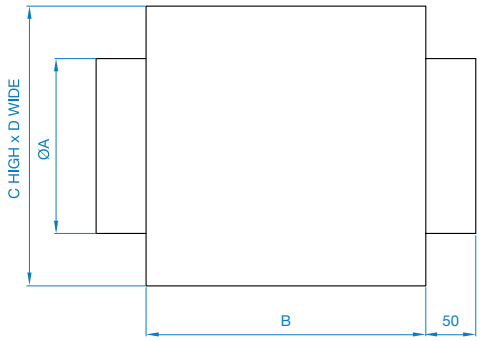
PANEL FILTER

Accessories

- Galvanised steel casing
- Filter media to BS EN 779 rating G2 with 85% arrestance
- Filter access with removable panel

Product Code	Fan Dia. A	B	C	D	Weight kg
018-0125-FILT-P	125	155	200	200	2
018-0150-FILT-P	150	155	250	250	2
018-0200-FILT-P	200	155	250	250	2
018-0250-FILT-P	250	200	300	300	3
018-0315-FILT-P	315	300	440	440	8
018-0400-FILT-P	400	400	440	440	8
018-0500-FILT-P	500	500	550	550	11



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SPIGOT SILENCER

Accessories

- Small metric range of attenuators with spigot connection
- Ideal for small fans
- Ideal for cross talk elimination
- Ideal for flexible or spiral ducting

Construction

Both types are rigidly constructed in galvanised sheet steel, with a highly absorbent sound attenuating lining between the outer casing and the inner perforated steel lining. The end faces of the silencer do not have threaded holes for fixings, but has a steel spigot for ease of mounting.

Melinex lined silencers must be used to prevent grease impregnation into the acoustic media for kitchen extract applications as prescribed in DW/172 HVAC Specification For Kitchen Ventilation Systems. For Melinex insertion losses, please contact Elta Fans. Silencers can be provided with differing lengths: 300, 600, 900 and 1200mmm.

Silencer Attenuation

To determine the sound level of a fan fitted with a silencer, the dynamic insertion loss should be subtracted from the sound power level spectrum (dBW) of the fan. This should be done for the entire octave band mid-frequency spectrum. The fan dBW ratings and silencer attenuation apply equally to in duct applications, with a silencer connected between the fan and the duct system.

Dynamic Insertion Loss

The silencer attenuation is defined as the “dynamic insertion loss”. The values quoted in the tables represent the difference between the sound power level of a fan and silencer combination (dBW) and that of the fan alone (dBW). The dynamic insertion losses shown are the attenuations recorded under ideal working conditions. The achieved attenuation will vary according to the air velocity and flow pattern in the airways. Noise regeneration can occur at higher velocities, especially in EP silencers.

Square / Rectangular Silencers

In highly noise sensitive areas, where the circular silencers cannot achieve the necessary attenuation levels, Elta Fans can design and build optional splitter silencers for greater effect.

SPIGOT SILENCER

Dynamic Insertion Loss

Product Code	Length	Insertion Loss @ Octave band (Hz)							
		63	125	250	500	1K	2K	4K	8K
068-0125-JF1	300mm	-3	-3	-8	-16	-21	-24	-22	-12
068-0125-JF2	600mm	-4	-8	-13	-30	-35	-35	-31	-15
068-0125-JF3	900mm	-9	-12	-18	-37	-41	-38	-34	-20
068-0125-JF4	1200mm	-11	-15	-21	-40	-46	-41	-36	-23
068-0150-JF1	300mm	-3	-3	-6	-14	-19	-23	-22	-11
068-0150-JF2	600mm	-4	-7	-12	-23	-30	-36	-31	-15
068-0150-JF3	900mm	-8	-9	-15	-31	-37	-37	-34	-18
068-0150-JF4	1200mm	-10	-14	-17	-34	-41	-40	-36	-20
068-0200-JF1	300mm	-2	-3	-6	-13	-17	-20	-18	-9
068-0200-JF2	600mm	-4	-6	-10	-20	-27	-32	-20	-11
068-0200-JF3	900mm	-7	-9	-14	-32	-39	-36	-26	-15
068-0200-JF4	1200mm	-10	-12	-17	-35	-41	-44	-28	-16
068-0250-JF1	300mm	-2	-3	-6	-12	-16	-19	-17	-8
068-0250-JF2	600mm	-3	-6	-10	-19	-25	-29	-18	-10
068-0250-JF3	900mm	-5	-8	-12	-24	-30	-30	-22	-14
068-0250-JF4	1200mm	-7	-10	-15	-31	-37	-38	-26	-15
068-0315-JF1	300mm	-1	-3	-6	-12	-15	-18	-16	-8
068-0315-JF2	600mm	-3	-5	-8	-16	-21	-22	-16	-14
068-0315-JF3	900mm	-4	-7	-10	-20	-31	-28	-17	-14
068-0315-JF4	1200mm	-6	-9	-14	-23	-32	-32	-18	-15
068-0400-JF1	300mm	-1	-2	-4	-11	-15	-15	-12	-8
068-0400-JF2	600mm	-2	-4	-7	-14	-17	-18	-14	-11
068-0400-JF3	900mm	-3	-6	-9	-18	-26	-23	-15	-12
068-0400-JF4	1200mm	-5	-8	-13	-22	-30	-27	-17	-12
068-0500-JF1	300mm	-1	-1	-3	-10	-14	-14	-11	-7
068-0500-JF2	600mm	-2	-4	-6	-14	-16	-16	-13	-11
068-0500-JF3	900mm	-3	-6	-8	-17	-24	-21	-15	-11
068-0500-JF4	1200mm	-4	-8	-12	-19	-28	-23	-16	-12

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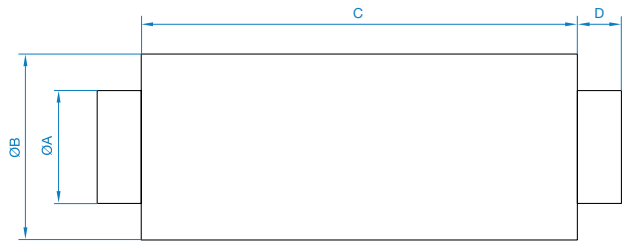
SPIGOT SILENCER

Dimensional Data

Product Code	Fan Dia.	A	B	C	D	Weight kg
068-0125-JF1	125	123	230	300	40	2.9
068-0125-JF2	125	123	230	600	40	5.4
068-0125-JF3	125	123	230	900	40	7.8
068-0125-JF4	125	123	230	900	40	10.2
068-0150-JF1	150	148	255	300	40	3.4
068-0150-JF2	150	148	255	600	40	6.1
068-0150-JF3	150	148	255	900	40	8.9
068-0150-JF4	150	148	255	1200	40	11.6
068-0200-JF1	200	198	305	300	40	4.2
068-0200-JF2	200	198	305	600	40	7.6
068-0200-JF3	200	198	305	900	40	11.0
068-0200-JF4	200	198	305	1200	40	14.5
068-0250-JF1	250	248	355	300	40	5.0
068-0250-JF2	250	248	355	600	40	9.1
068-0250-JF3	250	248	355	900	40	13.2
068-0250-JF4	250	248	355	1200	40	17.3
068-0315-JF1	315	313	420	300	40	6.1
068-0315-JF2	315	313	420	600	40	11.1
068-0315-JF3	315	313	420	900	40	16.1
068-0315-JF4	315	313	420	1200	40	21.0
068-0400-JF1	400	398	505	300	40	7.5
068-0400-JF2	400	398	505	600	40	13.6
068-0400-JF3	400	398	505	900	40	19.8
068-0400-JF4	400	398	505	1200	40	25.9



For 500 model, please contact Elta Fans.
Dimensions are in mm.

CO_2 TRANSMITTER

Accessories

- Power Supply 24V AC or DC
- CO_2 Level 0 - 2000ppm
- Temperature 0 - 50°C
- Excellent Long Term Stability
- Snap-in Cover

Overview

149-DCV-CO2 is a room transmitter for measuring carbon dioxide levels in air with an output signal 0 - 10V DC.

Function

149-DCV-CO2 with patented auto calibration process set new standards in CO_2 measuring for HVAC applications. The sensor is mounted in the cover-part of the casing. The cover is easy to detach from the back by means of snap-in grips and detachable terminals. This makes mounting easier. Furthermore, no cables have to be disconnected, which simplifies service and replacement.

Applications

The CO_2 level gives a direct indication of the indoor air quality. With this basic information, the ventilation can be controlled with high precision and the air quality improved. At the same time, the supply air will only be increased when necessary and the energy costs will thereby be reduced. 149-DCV-CO2 is suitable in environments such as cinemas, schools, conference rooms, assembly halls etc.

Measuring Principle

The CO_2 concentration is measured by means of infrared light, a technique that measures the absorption in gases. It has a reference measuring system that compensates values in relation to changes in light intensity.

Advantages

- Very high accuracy
- Exact identification of detected gas
- Low risk for contamination
- Short response time
- High long term stability
- Long calibration interval (>5 years)

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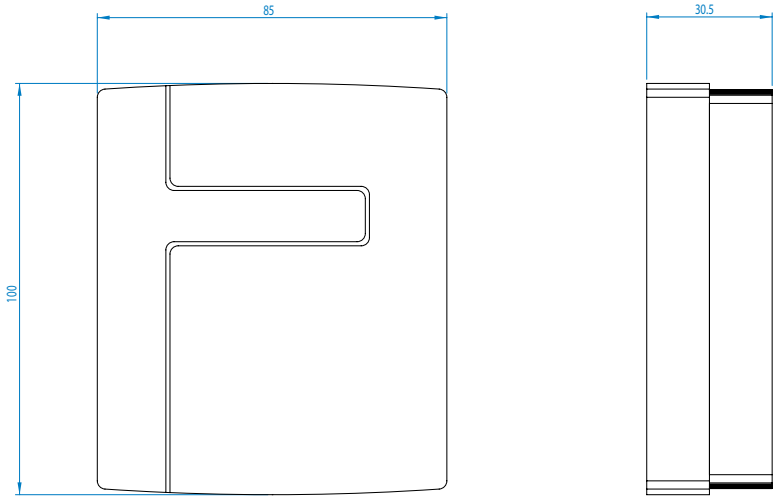
CO_2 TRANSMITTER

Accessories

Product Code	Supply Voltage	Power Consumption W	Ambient Temperature °C	Ambient Humidity % RH	Temperature Dependance ppm CO_2/°C	Storage Temperature °C	Long Term Stability ppm/year
149-DCV-CO2	24V AC +/- 15%, 50/60Hz or 15/35V DC	3	-5 - +55	0 - 90 Not Condensating	typ. 5	-40 - 70	typ. 20

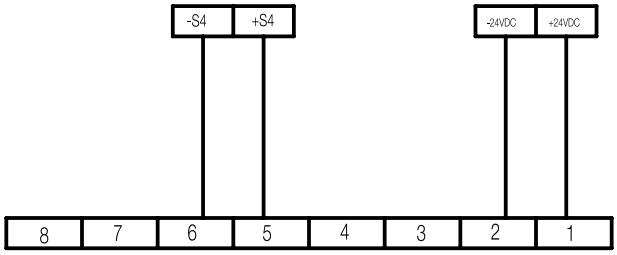
Product Code	Response Time	Warm-up Time	Protection Class	Measuring Principle	Working Range CO_2 ppm	Accuracy CO_2 ppm	Outputs Signal ppm
149-DCV-CO2	< 90s	< 5mins	IP30	NDIR (Non-Dispersive Infrared Technology)*	0 - 2000	< ± (50 +2% of measuring value)	CO_2 0 - V DC referring to 0 - 2000



Installation

149-DCV-CO2 should be mounted in a location with good air circulation and one that can be expected to give representative readings. 149-DCV-CO2 may be mounted either on a wall-box or straight on the wall. To remove the front cover, use a 3mm flat-blade screwdriver to depress the locking tongue in the lower part of the casing (see arrow figure). Press and twist the screwdriver and at the same time pull the bottom part of the front outwards. When the bottom end of the front is free from the casing bottom part, slide the cover towards the top of the casing to free the hooks holding the upper edge of the front cover.

Wiring Diagram



This product conforms with the requirements of European EMC standards CENELEC EN 61000-6-1 and EN 61000-6-3 and carries the CE mark.
N.B. System neutral and signal neutral should be separately wired, because of current peaks in the supply wires. Screw terminal: Max. 1.5mm².

HUMIDITY TRANSMITTER

Accessories

- Output Signal 0 - 10 V DC
- Protection Class IP30
- Good Long Term Stability
- Snap-on Cover
- Resistant to contamination

Overview

The HRT room transmitters for use with our Demand Control Ventilation systems are for measuring humidity or temperature in a room.

Relative Humidity

149-DCV-HRT transmitters have a capacitive thin-film element which gives a signal that is proportional to the relative humidity. The measuring signal is converted by the built-in electronics to output signal 0...10V. The sensor element has rapid response to changes in humidity and excellent long-term stability. The element also has good durability in contaminated environments.

Supply Voltage

For output signal 0...10 V, the transmitter should be supplied with 24 V AC ±10 % or 15...35 V DC. The transmitter has automatic adaptation to the connected voltage.

Accuracy at 20%

Humidity: ±3 % RH, Temperature: ±0.4°C (±0.3°C with temperature sensor PT1000).

Installation

The transmitter should be mounted in a location with good air circulation where it can be expected to give a representative reading. It may be mounted on a wall-box or directly on the wall. To remove the front cover, depress the locking tongue in the lower part of the casing using a 3 mm flat-blade screwdriver. Press and twist the screwdriver and at the same time pull the bottom part of the casing, slide the cover towards the top of the casing to free the hooks holding the upper edge of the front cover.

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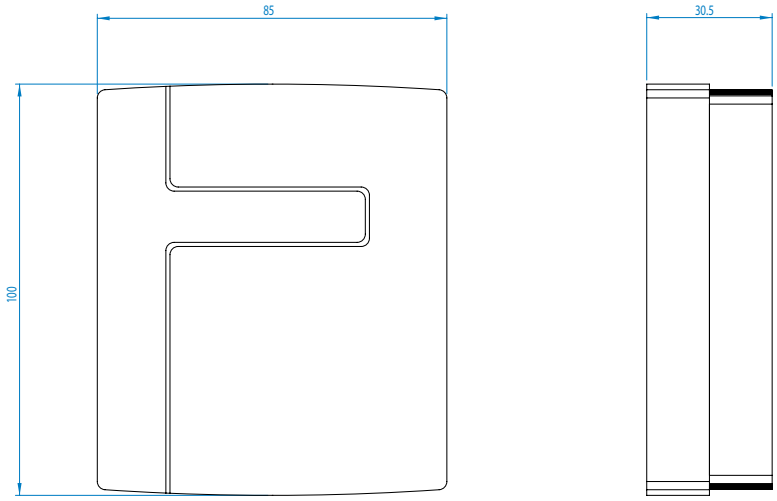
HUMIDITY TRANSMITTER

Accessories

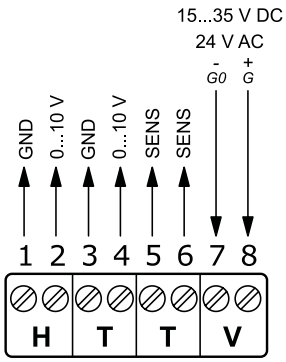
Product Code	Type	Output Signal V	Supply Voltage U_v	Power Consumption W	Electrical Connection mm²	Storage Temperature	Protection Class
149-DCV-HRT	Humidity & Temperature Transmitter	0 - 10	24 V AC ±10 % or 15...35 V DC	< 1 W	Screw terminals max 1.5 (AWG 16)	-25 - 60	IP30

Mode of Operation	Analogue Output	Working Range
Relative Humidity	0...10 V, IL< 1 mA (0...100% RH)	0...50% RH

Dimensions



Wiring Diagram



This product conforms with the requirements of European EMC standards CENELEC EN 61000-6-1 and EN 61000-6-3 and carries the CE mark.

PRESENCE DETECTOR

Accessories

- Power Supply 24V AC or DC
- Intended for wall or ceiling mounted
- Unobtrusive design
- Potential-free, changeover relay
- Both relay on-delay and/or relay off-delay, can be individually set

Overview

149-DCV-PIR is a presence detector designed for Demand Control Ventilation systems.

Function

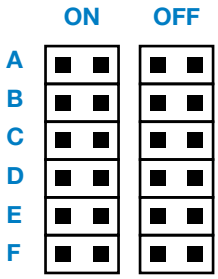
The PIR is a presence detector designed for automatic ventilation control of DCV systems. It saves money and gives higher comfort in premises which require forced ventilation for shorter periods of time, such as conference rooms, assembly-halls etc. The unit provides a changeover relay signal output for start/stop of fan or similar equipment. It can be wall or corner mounted with 110°, 15m detection range.

Range Adjustments

In order to suit different rooms or areas, the detection range of PIR can be adjusted by changing the direction of the sensor. To change the sensor direction, release the screw on the mounting bracket and then carefully move the sensor to the direction desired.

On / Off Delay

The ON and OFF delays are designed to provide smarter energy management of DCV systems. ON delay is the time given to the sensor to certify the occupancy, before it activates the output relay. OFF delay is the time that the relay is activated after the last detection. Both ON and OFF delays can be easily set by placing the jumper head on the corresponding pins as following.



	A	B	C	D	E	F
ON	0s	10s	30s	1min	5mins	10mins
OFF	10s	1min	5mins	10mins	20mins	30mins

Technical Data

Product Code	Infrared Sensor	Power Supply	Detection Range	Output Relay	Consumption	Mounting Height m
149-DCV-PIR	Dual Element	24 ± 2 V AC/DC	15 x 15m at 15°C	24 V DC, 0.2 A max.	5mA @24 V AC	1.8 - 3.6
Product Code	**Mounting Bracket**	**Detectable Speed m/s**	**RFI Immunity**	**Ambient Temperature °C**	**Ambient Humidity RH max.**	**Dimensions mm**
149-DCV-PIR	MB-99	0.1 - 3.0	Av. 20V/m (10 - 1000MHz)	-20- 50	95%	112 x 66 x 45

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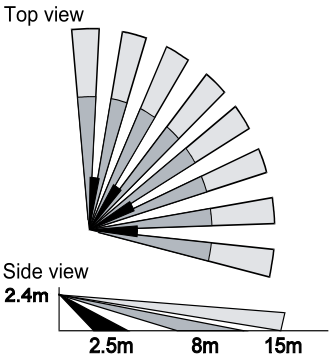
PRESENCE DETECTOR

Accessories

Operation

Standby

After the warm up time expires, the sensor enters into standby mode. The detector will check whether both delays are properly set. If not, the green LED will blink to indicate.



Relay ON Delay

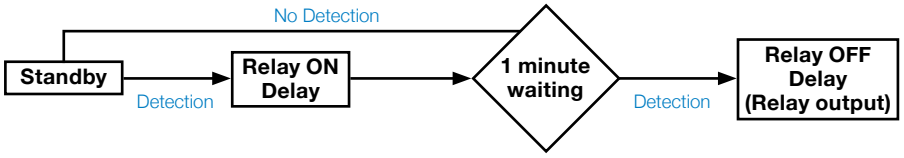
Relay ON delay is the time given to sensor to verify true occupancy before activating the relay output. Any further detection during ON delay will NOT reset the timer.

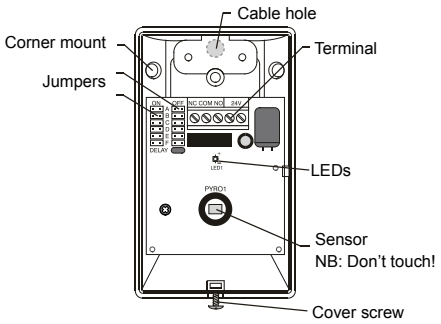
1 Minute Waiting

When Relay ON delay expires, the sensor enters into a 1 minute waiting time. If no detection occurs within 1 minute, the sensor will return to standby mode. If any detection occurs, then relay output will be activated and Relay OFF delay will be started.

Relay OFF Delay

Relay OFF delay is the time of relay activating. Every detection during this period will reset the timer.



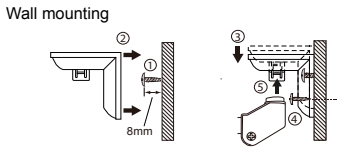


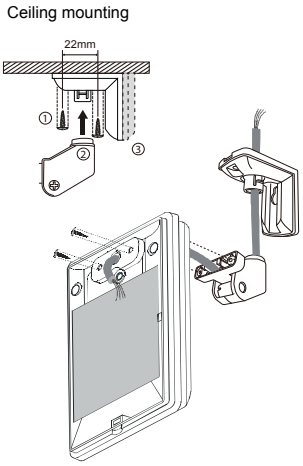
Installation

Do not install where the detector is exposed to direct sunlight or directly above strong sources of heat. Make sure the detection area does not have any obstruction (plants, large pieces of furniture, curtains etc.) which may block the detection.

Installation

1. Mount the base of mounting bracket on the selected position. Lead the cable through the access tunnel of mounting bracket or through the knockout openings (see description-picture page 1).
2. Open the front cover by loosening the locking screw at the bottom. Lead the cable into the unit and assemble the mounting bracket with the unit.
3. Connect the cable to the corresponding terminals according to the instructions below.
4. Replace the front cover and then proceed with the walk test.

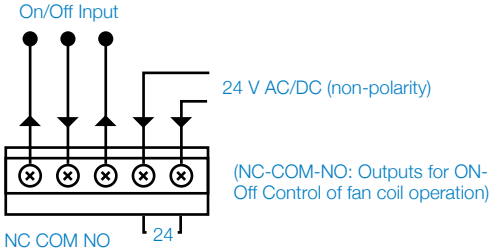




Walk Test

Apply power supply and allow 25 seconds for sensor to warm up. The green LED will blink during warm up period. Walk across the detection zones (invisible) at normal speed. The red LED will blink whenever the sensor detects the motion.

Wiring Diagram



This product conforms with the requirements of European EMC standards CENELEC EN 61000-6-1 and EN 61000-6-3 and carries the CE mark.
N.B. System neutral and signal neutral should be separately wired, because of current peaks in the supply wires. Screw terminal: Max. 1.5mm².

PRESSURE TRANSMITTER

Accessories

- Three settable working ranges for each model 100/300/500Pa
- Output signal 0 - 10V
- High level of accuracy and stability
- Models with square root output signal
- Quick and easy mounting

Overview

DPT is a transmitter for use with our Demand Control Ventilation system for measuring differential pressure in air and neutral gases for controlling pressure in HVAC systems.

Function

The transmitter consists of a plastic sensor-housing and a membrane of silicon LSR. The differential pressure affects the membrane which is connected to the sensor element. The element is manufactured with state-of-the art technology with a ceramic beam onto which thick-film resistors have been applied. The pressure on the membrane causes a movement which is transferred to the ceramic beam. Flexing of the beam gives changes in resistance. The changes in resistance are transmitted by means of built-in electronics to an analogue output signal. The measuring element gives a rapid response and a high level of accuracy. The properties of the ceramic element ensure that the transmitter has excellent long-term stability.

Sensor Housing

The sensor housing is made of transparent plastic. The cable input is on the left hand side with cable gland. The cover is closed by a single screw and can easily be detached from the hinges when mounting.

Setting the Working Range

The transmitter has three different working ranges depending on the model. The working ranges are set via two dip switches in the lower left corner of the circuit board according to the table shown below. The supply voltage must be disconnected. You can also change the zero point of the pressure measurement by pressing the button above the dip switches.

P		
0...500Pa	0	0
0...300Pa	0	1
0...100Pa	1	0

Mounting

The sensor should be mounted vertically using screws in the mounting holes on the back edge. There are also two mounting holes on the upper side of the sensor housing.

Connection Set

A connection set consisting of tubing and pressure outlets can be supplied as accessory to DPT.

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PRESSURE TRANSMITTER

Accessories

Product Code	Supply Voltage	Power Consump-tion	Output Signal V	Load Impedance	Maximum Differential Pressure Pa	Pressure Connection	Cable Connection	Cable	Mounting	Material Sensor	
										Housing	Membrane
149-DCV-DPT	24 VAC + 15/-10 or 18 - 33V DC	10mA (0 -10V)	0 - 10	> 10kohm (0 - 10V)	Up to 500	Connection pipes for 6mm tube	Screw terminals. Cable gland with built-in strain relief	Three wire. Flexible cable is recommended	Vertical with pressure connections downwards	Transparent plastic	LSR (Silicon)

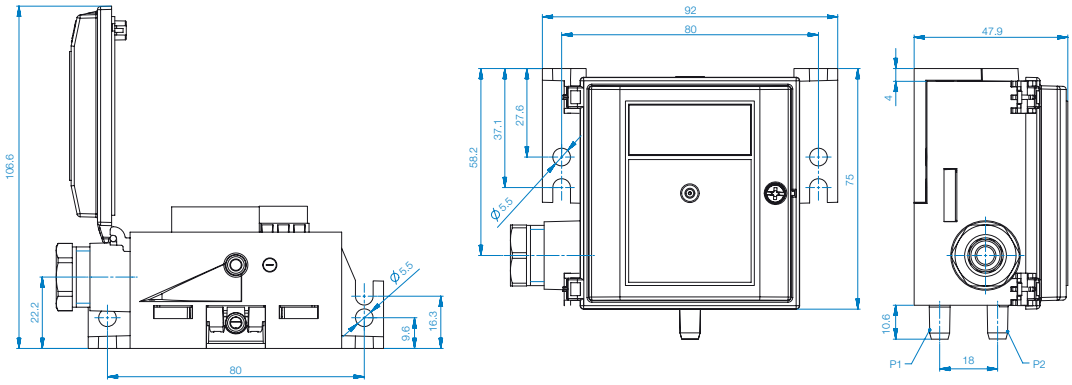
Product Code	Form of Protection	Accuracy		Temperature Dependence °C	Ambient Temperature °C	Storage Temperature °C	Dynamic Response Time ms	Resolution	ANS	DTV-ANSLUTNING
		Linerity	Hysteresis							
149-DCV-DPT	IP54	< +/- 1.0 % fs* for working ranges within 0...100 Pa, for higher working ranges +/- 0.7 % fs*	< +/-1.0% fs	< 0.04% fs	0 - 70	-10 - 70	< 20	Working ranges up to (and including) 100 Pa: < 0.2 % fs*, other working areas: < 0.1 % fs*	Mounting kit with 2m plastic tube & 2 pressure outlets	Pressure connection of metal, angled 90°

Installation Arrangement

1. Recommended installation arrangement: vertical, with pressure connections facing downward, drain of possible condensed water (factory calibration).
2. Horizontal, cover facing downward. Signal approximately 14 Pa higher than actual pressure.
3. Horizontal, cover facing upward. Signal approximately 14 Pa below actual pressure.

Mount the transmitter with minimum 10mm distance to magnetic material. If this is not possible there is a failure of up to minus 1 Pa for transmitters mounted on sheet steel.

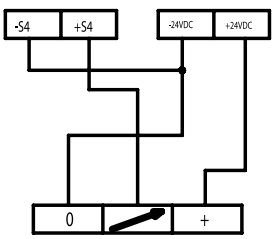
Dimensions



Wiring Diagrams

DTL 0 - 10V

+	Supply Voltage 24V AC / 18 - 33V DC
↗	Output signal 0 - 10V DC
0	System neutral



Dimensions are in mm.

* fs = fullscale, the complete sensor range

This product conforms with the requirements of European EMC standards CENELEC EN50081-1 and EN50082-1 and carry the CE-mark.

ROOM HUMIDISTAT

Accessories

- 1 Step
- High reliability and accuracy
- Protection class IP30
- Setpoint settings can be locked
- Changeover contact 250V AC, 5A

Overview

149-DCV-H1is an electro-mechanichal room humidistat for controlling humidification and/or dehumidification in HVAC systems.

Function

The humidistat uses a synthetic element as sensor medium. The synthetic element stretches as the humidity increases and shrinks as the humidity decreases. These changes are transmitted to a microswitch. The setpoint knob affects the position of the microswitch in relation to the synthetic element. The setpoint can be set at between 35...95% RH.

Synthetic Element

We have developed a new synthetic element that gives a high accuracy at a low cost. In order to eliminate the risk of tampering, the setpoint knob can be locked In order to eliminate the risk of tampering, the setpoint knob can be locked by means of a locking screw under the cover.

Typical applications

Can be used to control a humidifier or a dehumidifier or for on/off controlling of a fan. Can also be used to alarm when the humidity exceeds or falls below a pre-set level.

Technical Data

Product Code	Material Casing	Ambient Temperature °C	Mounting	Protection Class	Outputs Changeover Contact	Setpoint %	Hysteresis %
149-DCV-H1	Polycarbonate	0 - 40°C	Wall	IP30	250V AC, 5A	35 - 95 RH	+/- 4 RH

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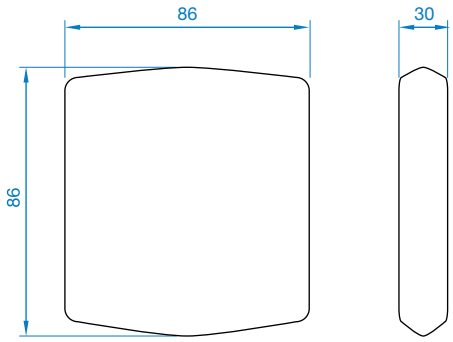
ROOM HUMIDISTAT

Accessories



Wiring

Humidification Closing contact between terminals 1 and 2
Dehumidification Closing contact between terminals 1 and 3

Dimensions are in mm.

This Product confirms with the requirements of European LVD standards EN 60730-1:2000+A11+A12, EN 60730-2-13:1998+A1 and carries the CE-mark

TEMPERATURE TRANSMITTER

Accessories

- Output Signal 0 - 10 V DC
- Temperature 0...50°C
- Good Long Term Stability

Overview

Room transmitters for measuring temperature in indoor environments.
Transmitters intended for wall mounting in HVAC systems. The sensor is mounted in the cover-part of the casing. The cover is easy to detach from the back by means of snap-in grips and detachable terminals. This makes mounting easier. Furthermore, no cables have to be disconnected, simplifying service and replacement.

Supply Voltage

The transmitter uses a supply voltage of 24 V AC ±10 % or 15...35 V DC. It automatically detects and adapts to the supply voltage connected.

Temperature Sensor

The unit has a built-in temperature sensor, working range 0...50°C.

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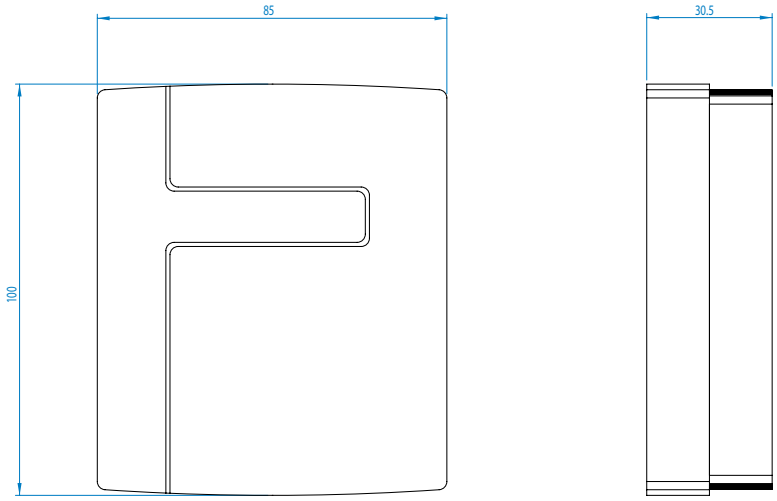
TEMPERATURE TRANSMITTER

Accessories

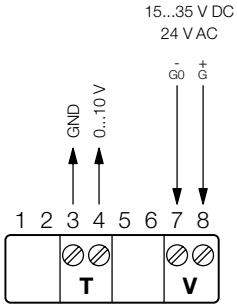
Product Code	Output Signal V	Supply Voltage U_V	Power Consumption W	Transformer Power VA	Electrical Connection mm²	Ambient Temperature	Ambient Humidity	Storage Temperature	Protection Class
149-DCV-TRT	Analogue	24 V AC ±10 % or 15...35 V DC	< 1 W	2	Screw terminals max 1.5 (AWG 16)	0...50°C	10...90 % RH non-condensing	-25 - +60°C	IP30

Analogue Output	Working Range	Accuracy at 20°C
0...10 V, IL< 1 mA	0...50°C	±0.4°C

Dimensions



Wiring Diagram



GND and G0 are internally connected.

This product conforms with the requirements of European EMC standards CENELEC EN 61000-6-1 and EN 61000-6-3 and carries the CE mark.

QUIETFLOW TWIN SQTDCV

Notes

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