



Twinflow STDR

Product Brochure

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Twinflow STDR

Roof Mounted Direct Drive Twin Centrifugal Fan

roof



OVERVIEW

The Twinflow STDR...EC incorporates the BAT (Best Available Technology) Vpro backward curved impeller, with three dimensional profiled blades powered by the ultra reliable Ziehl-Abegg EC (electronically commutated) external rotor motor. The range of twin roof fans are suitable for external mounting, manufactured in Aluzinc with a natural finish.

MORE INFORMATION

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QUICK FACTS

- ✓ 10 standard sizes from 200mm to 710mm.
- ✓ Air volume flow rates up to 3.9 m³/s (AC) / 3.84 m³/s (EC).
- ✓ Static pressures up to 1280 Pa (AC) / 1300 Pa (EC).
- ✓ Suitable for operating temperatures up to +60°C.
- ✓ Extensive range of stock available.

CASING

The unit casing shall be manufactured from 1.2mm thick natural finish Aluzinc. The casing shall be designed so as to minimise vibration and shall incorporate a louvered air discharge guarded against bird ingress. Drain points shall also be provided.

Each casing provides an inlet spigot to suit standard circular ducting. EPDM (Ethylene Propylene) rubber U shaped seals (being ozone and UV stable) are used to ensure a good seal back to the duct that is to be attached. Top access panels shall be provided for ease of servicing.

IMPELLER

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

MOTORS

The Twin range of units may have either an EC or AC external rotor motor fitted as standard. The motor contains sealed for life bearings. Thermal Class of motors to THCL 130 or 155 dependent on size.

Manufactured by Ziehl-Abegg providing increased reliability. All motors are suitable for use in ambient air conditions up to +60°C.

QUALITY MANAGEMENT

All units in the Elta range are designed and manufactured to procedures as defined in BS EN ISO 9001:2008.

They are also tested in accordance with BS848 Part 2 1985 (sound performance) and ISO 5801:2007 (airside performance).

TYPICAL APPLICATIONS

- Industrial Building
- Banks
- Hospitals
- Offices
- Hotels and Shopping Malls



Elta Fans Limited has a policy of continuous product development and improvement and therefore reserves the right to supply products which may differ from those illustrated and described in this publication. Confirmation of dimensions and data will be supplied on request.

Twinflow STDR

Performance, SFP & Electrical Data



SINGLE Phase - 220V to 240V / 50Hz

Product Code	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa.												Overall Efficiency %	FMEG	Motor Electrical Data		dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500			FLC Amps	Input kW		
STDR200-1AC	2490	m³ / s	0.125	0.115	0.107	0.099	0.091	0.076	0.061	0.045	0.026	0.004			20.1	-	0.28	0.065	Inlet	48
		W / (L/s)	0.50	0.54	0.59	0.64	0.69	0.82	1.01	1.33	2.15	12.31							Outlet	47
STDR250H-1AC	2386	m³ / s	0.291	0.280	0.268	0.256	0.244	0.220	0.194	0.167	0.139	0.108	0.077	0.024	21.4	N39	1.04	0.239	Inlet	54
		W / (L/s)	0.63	0.67	0.71	0.76	0.81	0.91	1.04	1.21	1.44	1.79	2.38	6.52					Outlet	55
STDR250L-1AC	2506	m³ / s	0.235	0.225	0.216	0.206	0.197	0.178	0.159	0.137	0.113	0.085	0.056	0.008	25.2	N44	0.63	0.145	Inlet	51
		W / (L/s)	0.56	0.59	0.62	0.65	0.69	0.77	0.87	1.01	1.22	1.58	2.27	12.45					Outlet	55
STDR315-1AC	1283	m³ / s	0.355	0.327	0.301	0.275	0.250	0.193	0.122	0.041					20.9	N40	0.70	0.154	Inlet	40
		W / (L/s)	0.40	0.44	0.48	0.52	0.58	0.73	1.10	2.75									Outlet	46
STDR400-1AC	1393	m³ / s	0.593	0.570	0.546	0.520	0.493	0.434	0.368	0.293	0.208	0.104			28.7	N45	1.40	0.292	Inlet	48
		W / (L/s)	0.48	0.50	0.52	0.55	0.57	0.64	0.74	0.89	1.15	1.95							Outlet	50
STDR500-1AC	1242	m³ / s	1.150	1.083	1.032	0.987	0.946	0.865	0.785	0.702	0.612	0.513	0.406	0.182	29.9	N42	3.03	0.665	Inlet	49
		W / (L/s)	0.53	0.57	0.60	0.63	0.66	0.72	0.80	0.90	1.03	1.20	1.45	2.68					Outlet	55

Overall static efficiency, r/min and FMEG values are per ISO 12759 installation category C. FLC 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.

Sound Data

SINGLE Phase - 220V to 240V / 50Hz

Product Code	Speed r/min		Sound Power Level dBW @ Octave Band Hz								Total dB	Silencer dBA Attenuation			
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz		JF1	JF2	JF3	JF4
STDR200-1AC	2490	Inlet	80	75	77	62	52	52	48	45	83	-6	-9	-13	-16
		Outlet	59	66	73	64	59	58	53	51	75	-	-	-	-
STDR250H-1AC	2386	Inlet	84	82	82	70	63	60	58	55	88	-6	-10	-12	-14
		Outlet	68	76	81	72	70	67	61	59	83	-	-	-	-
STDR250L-1AC	2506	Inlet	83	79	76	71	62	60	55	52	85	-7	-11	-13	-15
		Outlet	65	74	77	73	72	69	61	57	81	-	-	-	-
STDR315-1AC	1283	Inlet	75	74	65	55	46	48	44	36	78	-4	-6	-8	-10
		Outlet	72	76	68	65	61	56	51	47	78	-	-	-	-
STDR400-1AC	1393	Inlet	80	82	72	61	55	54	51	46	84	-3	-6	-8	-10
		Outlet	73	81	73	68	64	59	54	51	82	-	-	-	-
STDR500-1AC	1242	Inlet	83	81	73	64	58	57	55	54	85				
		Outlet	79	85	78	74	70	64	60	59	87				

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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Twinflow STDR

Performance, SFP & Electrical Data



THREE Phase - 380V to 415V / 50Hz

Product Code	Speed r/min	Airflow	Airflow m³/s @ Static Pressure Pa.												Overall Efficiency %	FMEG	Motor Electrical Data			dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500			FLC Amps	Input kW	Δ / Y		
STDR560-3AC	1356	m³ / s	1.794	1.770	1.745	1.719	1.693	1.636	1.575	1.507	1.432	1.347	1.250	1.011	43.1	N52	2.35	1.27	3 Ph Δ	Inlet	64
		W / (L/s)	0.66	0.68	0.69	0.70	0.72	0.75	0.79	0.83	0.87	0.93	0.99	1.19						Outlet	69
	1097	m³ / s	1.484	1.442	1.400	1.358	1.316	1.228	1.132	1.025	0.902	0.760	0.609	0.339	32.2		1.44	0.89	3 Ph Y	Inlet	58
		W / (L/s)	0.57	0.59	0.61	0.63	0.66	0.71	0.77	0.85	0.96	1.11	1.33	2.07						Outlet	64
STDR630-3AC	1178	m³ / s	2.315	2.282	2.247	2.211	2.174	2.096	2.012	1.920	1.819	1.707	1.582	1.286	39.4	N47	3.41	1.76	3 Ph Δ	Inlet	-
		W / (L/s)	0.70	0.72	0.73	0.75	0.77	0.81	0.85	0.90	0.95	1.01	1.09	1.30						Outlet	-
	780	m³ / s	1.542	1.472	1.401	1.328	1.252	1.086	0.897	0.692	0.509	0.367	0.258	0.099	23.7		1.6	0.80	3 Ph Y	Inlet	-
		W / (L/s)	0.49	0.52	0.55	0.58	0.62	0.72	0.86	1.10	1.45	1.93	2.64	6.36						Outlet	-
STDR710-3AC	1375	m³ / s	3.904	3.857	3.811	3.765	3.720	3.630	3.540	3.450	3.360	3.269	3.176	2.984	48.0	N52	6.8	4.20	3 Ph Δ	Inlet	-
		W / (L/s)	0.98	1.00	1.02	1.03	1.05	1.09	1.13	1.17	1.21	1.25	1.29	1.37						Outlet	-
	1162	m³ / s	3.296	3.207	3.126	3.050	2.979	2.843	2.712	2.585	2.458	2.330	2.200	1.924	34.9		4.8	3.056	3 Ph Y	Inlet	-
		W / (L/s)	0.89	0.92	0.94	0.96	0.99	1.04	1.09	1.14	1.20	1.26	1.34	1.51						Outlet	-

Overall static efficiency, r/min and FMEG values are per ISO 12759 installation category C. FLC 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.

Sound Data

THREE Phase - 380V to 415V / 50Hz

Product Code	Δ / Y		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz	
STDR560-3AC	Δ	Inlet	93	95	86	77	78	75	73	71	98
		Outlet	91	98	93	87	83	78	78	80	100
	Y	Inlet	88	90	79	71	72	68	66	65	92
		Outlet	87	96	87	80	76	72	70	72	97
STDR630-3AC	Δ	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
	Y	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
STDR710-3AC	Δ	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-
	Y	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-

Please contact Elta Fans for full sound data.

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.

Elta Fans Limited has a policy of continuous product development and improvement and therefore reserves the right to supply products which may differ from those illustrated and described in this publication. Confirmation of dimensions and data will be supplied on request.

For more information on Accessories & Wiring Diagrams, please see individual product downloads,
or visit eltaselect.com/information-centre

SINGLE Phase - 220V to 240V / 50Hz

Product Code	Electronic Controller	ACO Panel	Transformer Controller	Flexible Connections (each)	Clamps (each)	Silencer 300mm Long	Silencer 600mm Long	Silencer 900mm Long	Silencer 1200mm Long	Wiring Diagram No.no
STDR200-1AC	149-EL31	149-ACO18	149-TC12	018-0200-FLEX	018-200-CLAMP	068-0200-JF1	068-0200-JF2	068-0200-JF3	068-0200-JF4	152-2177
STDR250H-1AC	149-EL31	149-ACO18	149-TC12	018-0250-FLEX	018-250-CLAMP	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-2177
STDR250L-1AC	149-EL31	149-ACO18	149-TC12	018-0250-FLEX	018-250-CLAMP	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-2177
STDR315-1AC	149-EL31	149-ACO18	149-TC12	018-0315-FLEX	018-315-CLAMP	068-0315-JF1	068-0315-JF2	068-0315-JF3	068-0315-JF4	152-2177
STDR400-1AC	149-EL31TK	149-ACO18	149-TC12	018-0400-FLEX	018-400-CLAMP	068-0400-JF1	068-0400-JF2	068-0400-JF3	068-0400-JF4	152-2177
STDR500-1AC	149-EL31TK	149-ACO18	149-TC14	018-0500-FLEX	018-500-CLAMP	Please enquire.				152-2177

THREE Phase - 380V to 415V / 50Hz

Product Code	ACO Panel	Transformer Controller	Flexible Connections (each)	Clamps (each)	Silencer 300mm Long	Silencer 600mm Long	Silencer 900mm Long	Silencer 1200mm Long
STDR560-3AC	149-ACO3/B	149-TC33	018-0560-FLEX	018-560-CLAMP	Please enquire.			
STDR630-3AC	149-ACO3/B	149-TC35	018-0630-FLEX	018-630-CLAMP				
STDR710-3AC	149-ACO3/B	149-TC310	018-0710-FLEX	018-710-CLAMP				

Optimum Energy Efficiency Point

SINGLE Phase - 220V to 240V / 50Hz

Product Code	Volume m³/s	Pressure Pa	Input kW	Speed r/min	Efficiency %	FMEG
STDR200-1AC	0.060	207	0.062	2490	20.1	N43
STDR250H-1AC	0.150	281	0.201	2386	21.4	N39
STDR250L-1AC	0.127	272	0.139	2506	25.2	N44
STDR315-1AC	0.184	157	0.142	1283	20.9	N40
STDR400-1AC	0.301	245	0.261	1393	28.7	N45
STDR500-1AC	0.567	323	0.623	1242	29.9	N42

THREE Phase - 380V to 415V / 50Hz

Product Code	Volume m³/s	Pressure Pa	Input kW	Speed r/min	Efficiency %	FMEG
STDR560-3AC	1.032	492	1.205	1356	43.1	N52
STDR630-3AC	1.291	498	1.668	1178	39.4	N47
STDR710-3AC	2.047	883	3.830	1375	48.0	N52

Twinflow STD R

Performance, SFP & Electrical Data



SINGLE Phase - 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage	Airflow	Airflow m³/s @ Static Pressure Pa.												Overall Efficiency %	FMEG	Motor Electrical Data		dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500			FLC Amps	Input kW		
STDR200-1EC	10V	m³ / s	0.160	0.152	0.147	0.142	0.137	0.128	0.119	0.110	0.101	0.091	0.079	0.044	29.4	N49	1.15	0.128	Inlet	58
		W / (L/s)	0.77	0.81	0.85	0.89	0.92	0.99	1.07	1.16	1.26	1.40	1.59	2.61					Outlet	57
	8V	m³ / s	0.128	0.122	0.116	0.109	0.103	0.091	0.079	0.068	0.057	0.046	0.034	0.007	19.6		0.92	0.107	Inlet	55
		W / (L/s)	0.78	0.81	0.86	0.90	0.96	1.09	1.26	1.48	1.78	2.22	2.96	13.94					Outlet	55
	5V	m³ / s	0.078	0.066	0.057	0.048	0.040	0.023	0.004						14.7		0.31	0.038	Inlet	43
		W / (L/s)	0.40	0.48	0.56	0.67	0.81	1.44	8.59										Outlet	44
	2V	m³ / s	0.021												2.2		0.07	0.009	Inlet	21
		W / (L/s)	0.40																Outlet	22
STDR250H-1EC	10V	m³ / s	0.310	0.295	0.278	0.262	0.248	0.224	0.203	0.184	0.165	0.146	0.127	0.088	30.8	N48	2.04	0.242	Inlet	54
		W / (L/s)	0.59	0.63	0.67	0.71	0.76	0.84	0.93	1.03	1.15	1.31	1.53	2.32					Outlet	55
	8V	m³ / s	0.224	0.214	0.199	0.183	0.170	0.147	0.123	0.092	0.061	0.041	0.026		25.1		1.14	0.138	Inlet	50
		W / (L/s)	0.50	0.52	0.56	0.61	0.66	0.76	0.92	1.26	1.98	3.06	4.94						Outlet	50
	5V	m³ / s	0.132	0.110	0.090	0.071	0.054	0.024							17.3		0.37	0.043	Inlet	39
		W / (L/s)	0.28	0.33	0.41	0.52	0.70	1.64											Outlet	37
	2V	m³ / s	0.035												4.1		0.08	0.010	Inlet	*20
		W / (L/s)	0.27																Outlet	*20
STDR250L-1EC	10V	m³ / s	0.280	0.272	0.265	0.258	0.252	0.240	0.228	0.216	0.203	0.189	0.173	0.135	34.2	N51	1.97	0.244	Inlet	57
		W / (L/s)	0.76	0.79	0.82	0.85	0.88	0.93	0.99	1.06	1.14	1.24	1.36	1.72					Outlet	60
	8V	m³ / s	0.229	0.219	0.209	0.198	0.187	0.164	0.142	0.122	0.105	0.088	0.074	0.045	24.5		1.45	0.180	Inlet	54
		W / (L/s)	0.64	0.67	0.70	0.74	0.78	0.89	1.03	1.20	1.40	1.67	2.04	3.43					Outlet	55
	5V	m³ / s	0.129	0.115	0.102	0.088	0.075	0.048	0.026	0.010					20.3		0.43	0.053	Inlet	42
		W / (L/s)	0.33	0.38	0.43	0.50	0.59	0.95	1.86	4.96									Outlet	44
	2V	m³ / s	0.041	0.012											4.0		0.08	0.011	Inlet	29
		W / (L/s)	0.24	0.80															Outlet	30
STDR315-1EC	10V	m³ / s	0.556	0.542	0.528	0.514	0.500	0.472	0.442	0.412	0.380	0.344	0.303	0.187	38.0	N53	1.90	0.411	Inlet	51
		W / (L/s)	0.69	0.71	0.73	0.74	0.76	0.81	0.86	0.92	0.99	1.08	1.20	1.73					Outlet	57
	8V	m³ / s	0.432	0.418	0.403	0.387	0.370	0.331	0.284	0.223	0.133				32.5		1.05	0.222	Inlet	45
		W / (L/s)	0.49	0.51	0.53	0.55	0.58	0.64	0.73	0.88	1.25								Outlet	50
	5V	m³ / s	0.254	0.216	0.182	0.149	0.105								23.3		0.33	0.064	Inlet	35
		W / (L/s)	0.25	0.29	0.33	0.40	0.52												Outlet	38
	2V	m³ / s	0.064												2.3		0.10	0.014	Inlet	*20
		W / (L/s)	0.22																Outlet	*20
STDR400-1EC	10V	m³ / s	0.962	0.945	0.929	0.913	0.898	0.867	0.836	0.805	0.774	0.742	0.709	0.638	43.6	N54	4.29	0.944	Inlet	61
		W / (L/s)	0.89	0.91	0.93	0.94	0.96	1.00	1.04	1.08	1.12	1.17	1.23	1.36					Outlet	65
	8V	m³ / s	0.760	0.744	0.728	0.712	0.695	0.661	0.625	0.586	0.542	0.493	0.432	0.160	39.9		2.46	0.526	Inlet	56
		W / (L/s)	0.60	0.62	0.65	0.67	0.69	0.74	0.80	0.85	0.92	1.00	1.11	2.08					Outlet	59
	5V	m³ / s	0.433	0.409	0.381	0.349	0.311	0.196							29.7		0.62	0.132	Inlet	41
		W / (L/s)	0.28	0.30	0.33	0.37	0.42	0.61											Outlet	43
	2V	m³ / s	0.111												18.2		0.19	0.005	Inlet	*20
		W / (L/s)	0.04																Outlet	22

Overall static efficiency, r/min and FMEG values are per ISO 12759 installation category C. FLC 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.

A Variable Speed Drive is integrated within the fan.

*At 2V the average spherical free-field sound pressure levels cannot be accurately measured above the background level in our conventional laboratory facilities.

Twinflow STDR

Performance, SFP & Electrical Data



SINGLE Phase - 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage	Airflow	Airflow m³/s @ Static Pressure Pa.												Overall Efficiency %	FMEG	Motor Electrical Data		dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500			FLC Amps	Input kW		
STDR500-1EC	10V	m³ / s	1.302	1.271	1.240	1.208	1.175	1.107	1.035	0.959	0.877	0.788	0.691	0.456	44.3	N56	3.43	0.776	Inlet	52
		W / (L/s)	0.56	0.57	0.58	0.60	0.62	0.66	0.71	0.76	0.83	0.91	1.01	1.37					Outlet	59
	8V	m³ / s	1.020	0.982	0.942	0.902	0.860	0.771	0.672	0.561	0.427	0.240			40.3		1.89	0.429	Inlet	47
		W / (L/s)	0.39	0.41	0.43	0.45	0.47	0.52	0.60	0.70	0.85	1.26							Outlet	53
	5V	m³ / s	0.600	0.518	0.441	0.358	0.256								31.4		0.58	0.115	Inlet	35
		W / (L/s)	0.19	0.22	0.25	0.29	0.37												Outlet	39
	2V	m³ / s	0.133												13.8		0.18	0.005	Inlet	*20
		W / (L/s)	0.03																Outlet	*20

Overall static efficiency, r/min and FMEG values are per ISO 12759 installation category C. FLC 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.

A Variable Speed Drive is intergrated within the fan.

*At 2V the average spherical free-field sound pressure levels cannot be accurately measured above the background level in our conventional laboratory facilities.

Twinflow STDR

Sound Data



SINGLE Phase - 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage		Sound Power Level dBW @ Octave Band Hz								Total dB	Silencer dBA Attenuation			
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz		JF1	JF2	JF3	JF4
STDR200-1EC	10V	Inlet	86	83	84	78	64	63	60	60	90	-8	-12	-16	-19
		Outlet	65	74	81	78	70	67	64	64	84	-	-	-	-
	8V	Inlet	85	81	83	72	60	60	57	57	88	-7	-10	-14	-17
		Outlet	64	73	80	74	67	66	62	62	82	-	-	-	-
	5V	Inlet	76	73	73	60	47	51	48	39	79	-6	-10	-13	-16
		Outlet	56	67	69	63	55	55	52	47	72	-	-	-	-
	2V	Inlet	59	50	46	39	30	30	21	23	60	-6	-9	-12	-15
		Outlet	52	47	45	43	31	31	19	32	54	-	-	-	-
STDR250H-1EC	10V	Inlet	86	81	81	69	63	61	58	54	88	-7	-10	-12	-15
		Outlet	68	76	81	71	69	66	61	57	83	-	-	-	-
	8V	Inlet	84	78	77	65	59	56	54	49	86	-6	-10	-12	-14
		Outlet	66	74	74	67	65	62	57	54	78	-	-	-	-
	5V	Inlet	74	72	63	52	47	45	42	38	76	-5	-8	-10	-12
		Outlet	57	67	61	53	52	49	44	43	69	-	-	-	-
	2V	Inlet	-	-	-	-	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-	-	-	-	-
STDR250L-1EC	10V	Inlet	88	82	83	76	68	65	60	57	90	-8	-11	-14	-16
		Outlet	71	77	83	79	75	71	66	63	86	-	-	-	-
	8V	Inlet	86	79	82	69	63	60	56	54	88	-7	-10	-12	-15
		Outlet	66	74	81	73	69	66	61	59	83	-	-	-	-
	5V	Inlet	75	74	69	57	49	50	43	44	78	-5	-8	-10	-13
		Outlet	58	70	69	62	56	54	48	50	73	-	-	-	-
	2V	Inlet	68	62	54	45	35	32	22	22	69	-4	-7	-9	-11
		Outlet	51	61	51	47	44	41	28	20	62	-	-	-	-
STDR315-1EC	10V	Inlet	84	80	79	65	58	60	56	52	86	-6	-8	-10	-13
		Outlet	77	83	83	74	71	66	62	60	87	-	-	-	-
	8V	Inlet	78	78	70	58	51	54	49	44	81	-5	-7	-9	-11
		Outlet	71	80	73	67	64	60	55	50	82	-	-	-	-
	5V	Inlet	69	70	58	44	38	41	38	23	73	-4	-6	-8	-10
		Outlet	64	71	61	52	51	46	41	30	72	-	-	-	-
	2V	Inlet	-	-	-	-	-	-	-	-	-	-	-	-	-
		Outlet	-	-	-	-	-	-	-	-	-	-	-	-	-
STDR400-1EC	10V	Inlet	89	89	89	74	70	67	64	63	94	-5	-7	-9	-12
		Outlet	83	86	90	81	81	75	70	67	93	-	-	-	-
	8V	Inlet	84	87	83	68	63	61	58	54	90	-4	-7	-9	-12
		Outlet	76	86	84	75	76	70	63	59	89	-	-	-	-
	5V	Inlet	74	76	64	53	48	47	43	35	78	-3	-5	-7	-9
		Outlet	67	75	66	59	58	53	46	39	76	-	-	-	-
	2V	Inlet	-	-	-	-	-	-	-	-	-	-	-	-	-
		Outlet	43	44	45	42	37	21	16	23	50	-	-	-	-

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.

*At 2V the average spherical free-field sound pressure levels cannot be accurately measured above the background level in our conventional laboratory facilities.

Elta Fans Limited has a policy of continuous product development and improvement and therefore reserves the right to supply products which may differ from those illustrated and described in this publication. Confirmation of dimensions and data will be supplied on request.

Twinflow STDR

Sound Data



SINGLE Phase - 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz	
STDR500-1EC	10V	Inlet	85	81	76	71	62	61	57	55	87
		Outlet	82	87	82	77	74	68	64	62	90
	8V	Inlet	82	78	71	65	56	55	52	51	84
		Outlet	78	83	77	71	68	62	57	56	85
	5V	Inlet	76	64	58	51	43	42	41	28	76
		Outlet	72	68	62	56	54	48	45	33	74
	2V	Inlet	47	41	36	27	18	14	14	21	48
		Outlet	39	44	41	36	30	18	14	21	47

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.

*At 2V the average spherical free-field sound pressure levels cannot be accurately measured above the background level in our conventional laboratory facilities.

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Twinflow STDR

Performance, SFP & Electrical Data



THREE Phase - 380V to 480V / 50Hz or 60Hz

Product Code	Control Voltage	Airflow	Airflow m³/s @ Static Pressure Pa.												Overall Efficiency %	FMEG	Motor Electrical Data		dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500			FLC Amps	Input kW		
STDR500-3EC	10V	m³ / s	1.655	1.620	1.590	1.561	1.534	1.482	1.432	1.381	1.328	1.274	1.217	1.093	44.9	N54	2.43	1.588	Inlet	60
		W / (L/s)	0.86	0.89	0.91	0.94	0.96	1.01	1.06	1.10	1.15	1.20	1.26	1.38					Outlet	68
	8V	m³ / s	1.287	1.251	1.216	1.180	1.144	1.072	0.998	0.922	0.844	0.763	0.676	0.480	41.6		1.41	0.859	Inlet	54
		W / (L/s)	0.66	0.68	0.69	0.71	0.72	0.76	0.81	0.86	0.91	0.98	1.07	1.36					Outlet	60
	5V	m³ / s	0.770	0.698	0.630	0.563	0.497	0.355	0.169						35.4		0.49	0.209	Inlet	41
		W / (L/s)	0.28	0.29	0.31	0.34	0.37	0.48	0.83										Outlet	46
	2V	m³ / s	0.189												7.0		0.16	0.024	Inlet	*20
		W / (L/s)	0.13																Outlet	22
STDR560-3EC	10V	m³ / s	2.368	2.351	2.333	2.314	2.296	2.258	2.219	2.178	2.136	2.092	2.046	1.947	54.9	N61	4.00	2.624	Inlet	63
		W / (L/s)	1.02	1.04	1.05	1.06	1.08	1.10	1.13	1.16	1.19	1.22	1.26	1.33					Outlet	69
	8V	m³ / s	1.911	1.888	1.864	1.840	1.815	1.764	1.709	1.651	1.588	1.520	1.445	1.271	53.8		2.16	1.392	Inlet	56
		W / (L/s)	0.67	0.68	0.69	0.71	0.72	0.75	0.78	0.82	0.86	0.90	0.94	1.06					Outlet	62
	5V	m³ / s	1.164	1.127	1.087	1.042	0.993	0.875	0.708	0.422					52.5		0.70	0.318	Inlet	42
		W / (L/s)	0.25	0.26	0.28	0.29	0.31	0.36	0.44	0.66									Outlet	49
	2V	m³ / s	0.383	0.173											17.9		0.20	0.035	Inlet	20
		W / (L/s)	0.09	0.19															Outlet	29
STDR630-3EC	10V	m³ / s	3.115	3.087	3.060	3.032	3.005	2.950	2.894	2.838	2.782	2.724	2.666	2.545	58.3	N63	5.22	3.460	Inlet	62
		W / (L/s)	1.00	1.01	1.03	1.04	1.06	1.09	1.11	1.14	1.17	1.21	1.24	1.31					Outlet	70
	8V	m³ / s	2.473	2.444	2.415	2.385	2.354	2.292	2.227	2.159	2.086	2.010	1.928	1.740	57.7		2.78	1.805	Inlet	57
		W / (L/s)	0.66	0.68	0.69	0.71	0.72	0.75	0.78	0.81	0.85	0.88	0.92	1.02					Outlet	63
	5V	m³ / s	1.475	1.427	1.377	1.322	1.263	1.124	0.943	0.655					51.3		0.87	0.438	Inlet	43
		W / (L/s)	0.26	0.28	0.30	0.31	0.34	0.38	0.45	0.59									Outlet	48
	2V	m³ / s	0.501	0.246											16.7		0.23	0.048	Inlet	29
		W / (L/s)	0.09	0.19															Outlet	31
STDR710-3EC	10V	m³ / s	3.845	3.807	3.768	3.729	3.690	3.609	3.527	3.442	3.354	3.263	3.168	2.966	55.9	N61	5.36	3.636	Inlet	64
		W / (L/s)	0.84	0.86	0.87	0.89	0.91	0.94	0.97	1.00	1.04	1.08	1.11	1.19					Outlet	69
	8V	m³ / s	3.066	3.016	2.966	2.914	2.862	2.754	2.641	2.522	2.396	2.259	2.108	1.740	55.4		2.82	1.883	Inlet	58
		W / (L/s)	0.54	0.55	0.57	0.59	0.61	0.64	0.68	0.72	0.76	0.80	0.86	0.99					Outlet	64
	5V	m³ / s	1.839	1.756	1.668	1.573	1.469	1.218	0.833						51.3		0.87	0.441	Inlet	45
		W / (L/s)	0.21	0.23	0.25	0.27	0.29	0.35	0.46										Outlet	49
	2V	m³ / s	0.629	0.146											19.1		0.27	0.062	Inlet	28
		W / (L/s)	0.06	0.25															Outlet	32

Overall static efficiency, r/min and FMEG values are per ISO 12759 installation category C. FLC 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.

A Variable Speed Drive is integrated within the fan.

*At 2V the average spherical free-field sound pressure levels cannot be accurately measured above the background level in our conventional laboratory facilities.

Twinflow STD R

Sound Data



THREE Phase - 380V to 480V / 50Hz

Product Code	Control Voltage		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1 kHz	2 kHz	4 kHz	8 kHz	
STD R500-3EC	10V	Inlet	91	87	86	77	70	69	65	63	93
		Outlet	88	91	93	86	82	76	72	70	97
	8V	Inlet	88	85	78	72	63	62	58	59	90
		Outlet	83	88	84	79	75	69	65	64	91
	5V	Inlet	80	72	64	57	48	51	49	41	81
		Outlet	76	75	69	63	60	56	53	46	79
	2V	Inlet	-	-	-	-	-	-	-	-	-
		Outlet	51	48	42	40	40	33	21	22	54
STD R560-3EC	10V	Inlet	93	92	90	77	74	73	69	68	97
		Outlet	89	93	94	87	84	78	75	74	98
	8V	Inlet	89	88	79	71	67	65	62	62	92
		Outlet	84	91	86	80	77	71	68	67	93
	5V	Inlet	82	74	65	56	54	51	48	46	83
		Outlet	77	77	71	66	67	58	53	48	81
	2V	Inlet	55	51	37	39	35	26	15	14	57
		Outlet	54	61	43	46	47	31	18	14	62
STD R630-3EC	10V	Inlet	92	94	85	79	75	72	69	67	97
		Outlet	92	98	94	88	83	77	76	77	101
	8V	Inlet	87	90	78	73	69	65	62	61	92
		Outlet	86	93	87	81	77	70	67	67	95
	5V	Inlet	82	76	63	58	54	52	51	45	83
		Outlet	81	78	72	65	61	57	54	49	83
	2V	Inlet	74	48	36	40	45	34	22	17	74
		Outlet	60	53	44	50	50	37	23	21	62
STD R710-3EC	10V	Inlet	93	95	86	77	78	75	73	71	98
		Outlet	91	98	93	87	83	78	78	80	100
	8V	Inlet	88	90	79	71	72	68	66	65	92
		Outlet	87	96	87	80	76	72	70	72	97
	5V	Inlet	82	75	65	58	60	56	56	50	83
		Outlet	80	78	71	66	64	59	57	53	83
	2V	Inlet	61	51	40	44	47	35	26	23	62
		Outlet	55	53	46	52	49	39	34	30	59

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.

*At 2V the average spherical free-field sound pressure levels cannot be accurately measured above the background level in our conventional laboratory facilities.

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For more information on Accessories & Wiring Diagrams, please see individual product downloads,
or visit eltaselect.com/information-centre

SINGLE Phase - 200V to 277V / 50Hz or 60Hz

Product Code	Electronic Controller	ACO Panel	Flexible Connections (each)	Clamps (each)	Silencer 300mm Long	Silencer 600mm Long	Silencer 900mm Long	Silencer 1200mm Long	Wiring Diagram No.no
STDR200-1EC	149-POT-10	149-ACO14E	018-0200-FLEX	018-200-CLAMP	068-0200-JF1	068-0200-JF2	068-0200-JF3	068-0200-JF4	152-000236
STDR250H-1EC	149-POT-10	149-ACO14E	018-0250-FLEX	018-250-CLAMP	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-000236
STDR250L-1EC	149-POT-10	149-ACO14E	018-0250-FLEX	018-250-CLAMP	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-000236
STDR315-1EC	149-POT-10	149-ACO14E	018-0315-FLEX	018-315-CLAMP	068-0315-JF1	068-0315-JF2	068-0315-JF3	068-0315-JF4	152-000244
STDR400-1EC	149-POT-10	149-ACO1/B	018-0400-FLEX	018-400-CLAMP	068-0400-JF1	068-0400-JF2	068-0400-JF3	068-0400-JF4	152-000244
STDR500-1EC	149-POT-10	149-ACO1/B	018-0500-FLEX	018-500-CLAMP	Please enquire.				152-000244

THREE Phase - 380V to 480V / 50Hz or 60Hz

Product Code	Electronic Controller	ACO Panel	Flexible Connections (each)	Clamps (each)	Silencer 300mm Long	Silencer 600mm Long	Silencer 900mm Long	Silencer 1200mm Long	Wiring Diagram No.no
STDR500-3EC	149-POT-10	149-ACO3/B	018-0500-FLEX	018-500-CLAMP	Please enquire.				152-2MOEA03K3
STDR560-3EC	149-POT-10	149-ACO3/B	018-0560-FLEX	018-560-CLAMP					152-2MOEA03K3
STDR630-3EC	149-POT-10	149-ACO3/B	018-0630-FLEX	018-630-CLAMP					152-2MOEA03K3
STDR710-3EC	149-POT-10	149-ACO3/B	018-0710-FLEX	018-710-CLAMP					152-2MOEA03K3

Optimum Energy Efficiency Point

SINGLE Phase - 200V to 277V / 50Hz or 60Hz

Product Code	Volume m³/s	Pressure Pa	Input kW	Speed r/min	Efficiency %	FMEG
STDR200-1EC	0.084	382	0.127	3455	29.4%	N49
STDR250H-1EC	0.146	353	0.193	2515	30.8%	N48
STDR250L-1EC	0.159	441	0.235	3340	34.2%	N51
STDR315-1EC	0.298	406	0.364	2019	38.0%	N53
STDR400-1EC	0.521	638	0.848	2204	43.6%	N54
STDR500-1EC	0.671	410	0.694	1415	44.3%	N56

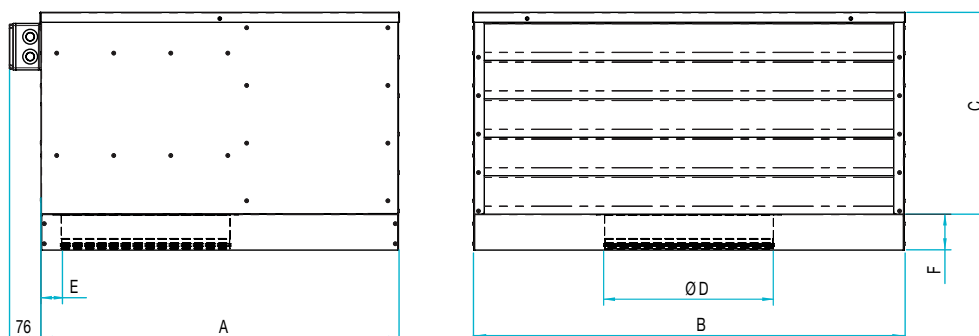
A Variable Speed Drive is integrated within the fan.

THREE Phase - 380V to 480V / 50Hz or 60Hz

Product Code	Volume m³/s	Pressure Pa	Input kW	Speed r/min	Efficiency %	FMEG
STDR500-3EC	0.736	739	1.322	1803	44.9%	N54
STDR560-3EC	1.337	928	2.446	1804	54.9%	N61
STDR630-3EC	1.755	999	3.228	1628	58.3%	N63
STDR710-3EC	2.052	829	3.265	1340	55.9%	N61

Twinflow STD R

Dimensional Data



Product Code	A	B	C	D	E	F	Weight kg
STD R200	550	565	296	200	56	85	30
STD R250L	602	652	387	250	55	85	40
STD R250H	602	652	387	250	55	85	41
STD R315	750	864	478	315	73	85	65
STD R400	846	1019	478	400	48	85	85
STD R500	988	1254	606	500	50	85	118
STD R560	1088	1374	660	560	80	85	164
STD R630	1158	1514	751	630	69	85	200
STD R710-AC	1270	1674	842	710	69	105	278
STD R710-EC	1270	1674	842	710	69	105	233

All dimensions are shown in mm.



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