



**TERMINATOR
ROOF EXTRACT
FANS**

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PROUD TO BUILD BRITISH



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We've been pioneers in new air technology since 1966. Our heritage is in the design and manufacturing of fans and ventilation systems. *We put our energy into efficient ventilation so you don't waste yours.*



Pioneering

We lead the way in product innovation with a stream of ground-breaking products over decades.



Agile

We're one of the UK's leading manufacturers, covering both residential and commercial air quality. We offer innovative advice and provide flexible solutions.



Attentive

We're expert listeners, rising to any challenge and going the extra mile for our customers. We add value by solving problems. We sell solutions, not fans.



Trusted

We have a reputation for our build quality. We establish long term relationships and are always transparent with our test data.



Expert

Our team is made up of over 600 people, 50 of which have over 25 years' experience. We have the skills and knowledge to help find the best solution for our customers.



Personal

We work closely with our customers and can provide bespoke solutions to meet their specific project needs. Many of our product ranges were developed this way.

“Our expertise, experience and innovation are what makes us stand out from the rest of the market.”

Nuaire.



For help with selecting a unit, speak to us on **02920 858200** or email: enquiries@nuaire.co.uk

ABOUT TERMINATOR ROOF EXTRACT FANS

Stylish, low profile roof fans.

UNOBTRUSIVE DESIGN

Extremely rigid ultra low profile GRP cowl easily accommodated on all building profiles – cowl is also UV resistant.

ANY ROOF PROFILE

Soaker sheets and flashing plates are available to cater for all roof profiles.

ENERGY EFFICIENT

All 3 phase models are compatible with Ecosmart controls providing the most energy efficient cost effective solution.

QUIETER SYSTEM

Widest range of impeller types together with matching silencers provide the perfect acoustic solution.

SYSTEM CONTROL

Ecosmart compatibility allows other fans/ AHU's to interface directly with the Terminator. (3 phase only).

AVOIDS HEAT LOSS

Integrated backdraught shutters, limits heat loss from building when unit is off. Motorised dampers are optional.

FLEXIBLE INSTALLATION

The cowl can be wall mounted vertically for exposed weather location.

PERFORMANCE OPTIONS

Axial, mixed flow or centrifugal impeller options cater for all your systems particular pressure and sound requirements.

COLOUR MATCH

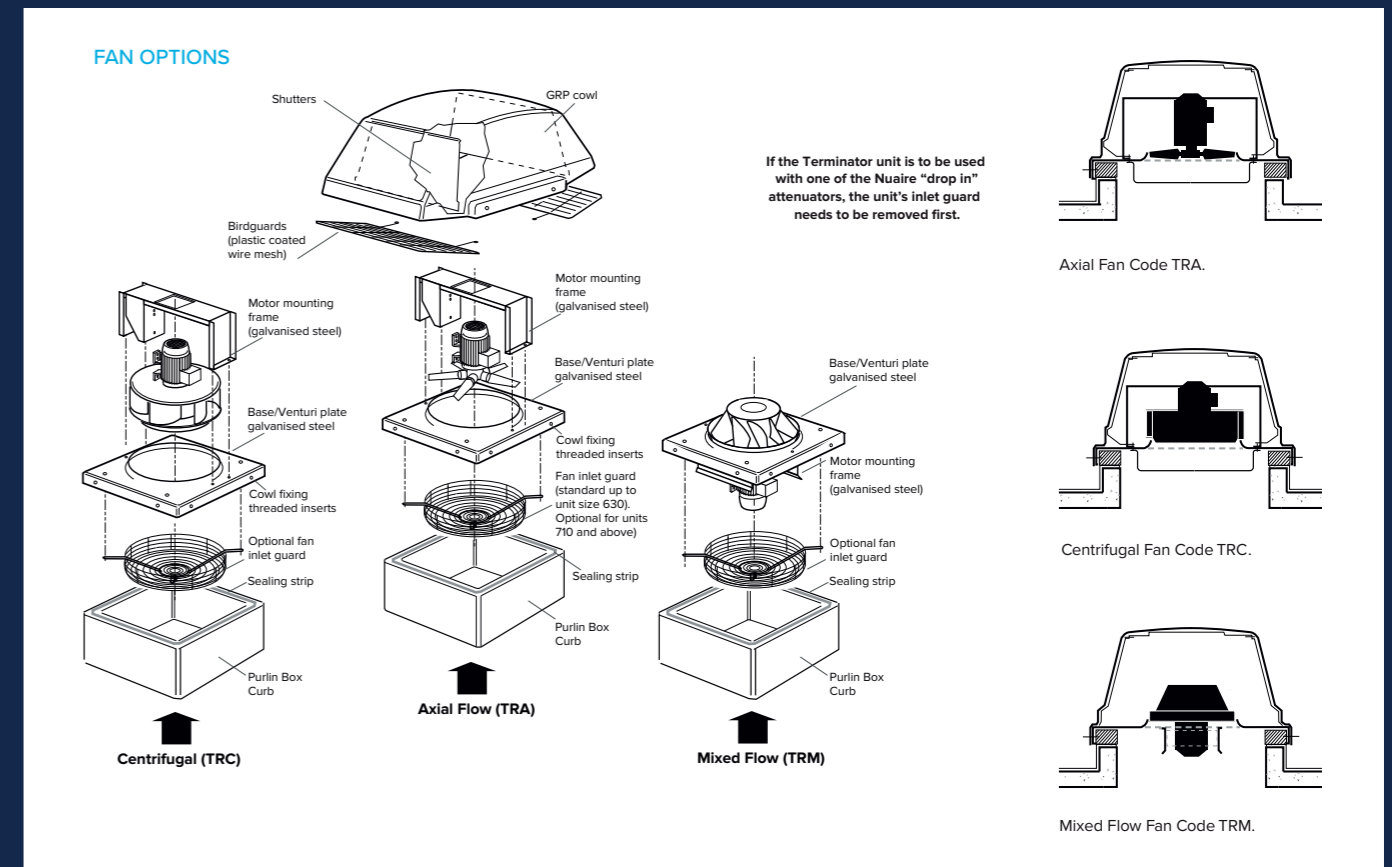
Standard cowl colour is goose wing grey (BS 00A05), (although any BS or RAL colour can be supplied).

ANCILLARIES

Full range of attenuators, mounting curbs, wall plates, etc. are available to complete your installation.

WARRANTY

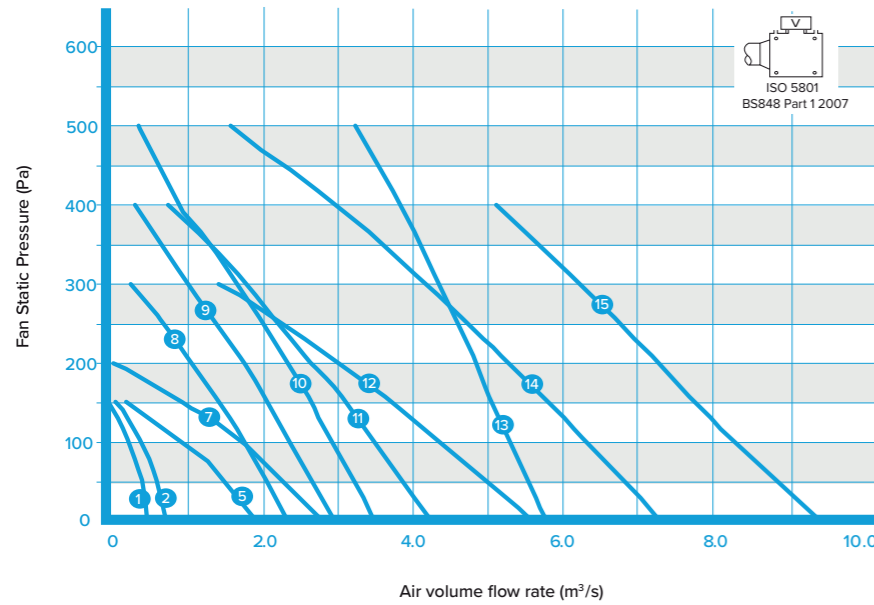
Terminator has a 3 year warranty. Ecosmart Terminator has a 5 year warranty.



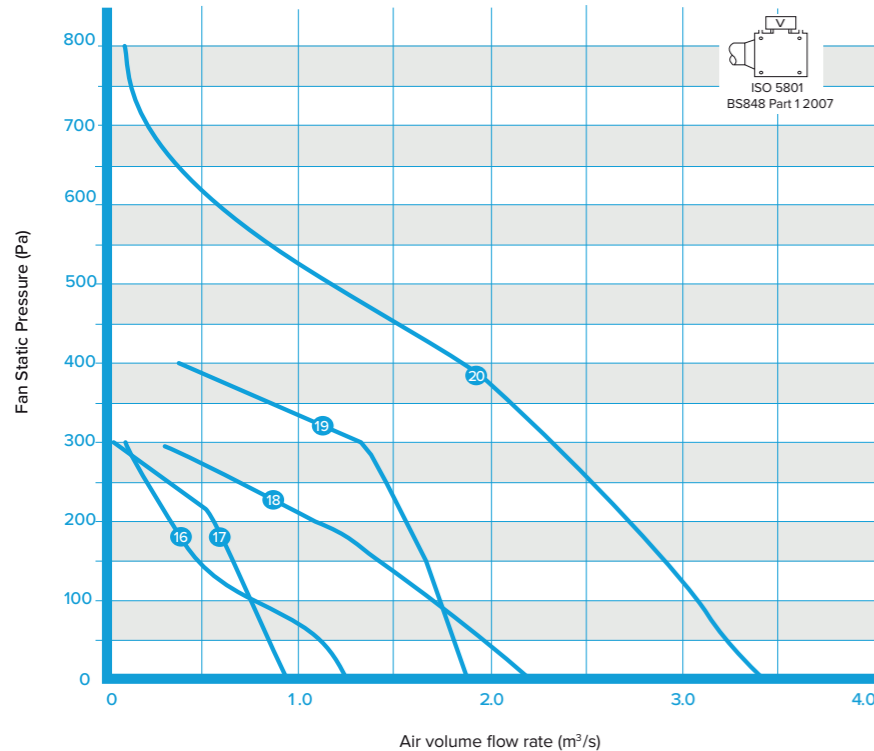
TERMINATOR ROOF EXTRACT FANS

PERFORMANCE AND TECHNICAL INFORMATION

TERMINATOR TRA AXIAL FLOW UNITS 1 - 15



TERMINATOR TRA AXIAL FLOW UNITS 1 - 15



CODE DESCRIPTIONS

TRAS 315 - 4 1

1 2 3 4 5 6

1. Range code
2. Impeller
A = Axial
M = Mixed Flow
C = Centrifugal
3. Shutter
4. Fan size
5. Number of poles
6. Phase:
1 = Single phase
3 = Three phase

CODE DESCRIPTIONS

(ES) (B) (C)

1 2 3

1. ES = Full Ecosmart controls – BMS interfaces and commissioning. Controls (as 2 & 3 below) full compatibility with Ecosmart sensors.
2. B = BMS interfaces 0-10V, volt free run and fail indication. Commissioning/speed control built in. Adjustable trickle and boost if required
3. C = Commissioning/speed control built in. Adjustable trickle and boost if required. All the above control options are preprogrammed with a soft start function. The above control options are provided in a purpose made module, mounted remote from the unit. Other controls to be specified separately see selection table.

ELECTRICAL & SOUND AXIAL IMPELLER TRA

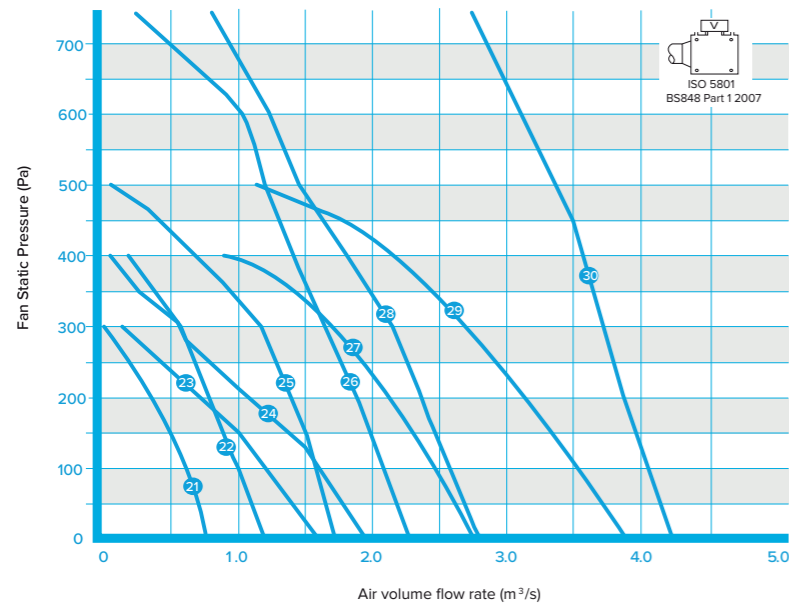
CURVE	CODE	COWL SIZE	PHASE	RPM	MOTOR POWER (kW)	FLC (AMPS)	SC (AMPS)	SC ★/▲	INDUCT INLET OPEN INLET OPEN OUTLET	SOUND POWER LEVELS (dB re 10 ⁻¹² W) OCTAVE BAND MID FREQUENCY (Hz)							OPEN INLET/ OUTLET dBA@3m
										125	250	500	1K	2K	4K	8K	
1	TRAS315-41	A	1	1300	0.12	1.1	2.9	-	induct inlet	74	72	64	61	63	60	48	51
									open inlet	68	69	63	61	63	60	48	
									open outlet	68	72	66	64	67	64	52	
2	TRAS350-41	A	1	1300	0.09	0.85	1.45	-	induct inlet	72	73	68	63	63	58	47	52
									open inlet	66	70	67	62	63	58	47	
									open outlet	66	73	70	65	67	62	51	
5	TRAS560-61	C	1	860	0.25	2.1	5	-	induct inlet	80	74	68	71	70	68	59	58
									open inlet	76	73	68	71	70	68	59	
									open outlet	76	76	71	74	74	72	63	
7	TRAS630-61	D	1	835	0.55	5.4	14.8	-	induct inlet	94	86	84	85	84	80	71	72
									open inlet	92	85	84	85	84	80	71	
									open outlet	92	88	87	88	88	84	75	
8	TRAS500-41	C	1	1335	0.55	3.6	10.8	-	induct inlet	80	81	74	77	76	74	65	64
									open inlet	77	80	74	77	76	74	65	
									open outlet	77	83	77	80	80	78	69	
9	TRAS560-41	C	1	1335	0.94	3.6	14	-	induct inlet	87	82	76	79	77	76	67	66
									open inlet	84	80	75	78	77	76	67	
									open outlet	84	83	78	81	81	80	71	
9	TRAS560-43	C	3	1335	0.75	2.3	8.7	-	induct inlet	86	79	76	78	76	72	63	64
									open inlet	84	78	76	78	76	72	63	
									open outlet	84	81	79	81	80	76	67	
10	TRAS630-43	D	3	1320	1.5	4.4	17.7	-	induct inlet	81	89	85	88	87	86	82	75
									open inlet	79	88	85	88	87	86	82	
									open outlet	79	91	88	91	91	90	86	
11	TRAS80L-43	E	3	1398	1.5	4.4	17.7	-	induct inlet	81	89	85	88	87	86	82	75
									open inlet	79	88	85	88	87	86	82	
									open outlet	79	91	88	91	91	90	86	
12	TRAS100H-63	F	3	930	1.5	4	18	-	induct inlet	87	85	82	83	83	83	81	72
									open inlet	86	85	82	83	83	83	81	
									open outlet	86	88	85	86	87	87	85	
13	TRAS80H-43	E	3	1398	2.7	7.5	5.3	-	induct inlet	87	93	86	88	86	85	82	75
									open inlet	84	92	86	88	86	85	82	
									open outlet	84	95	89	91	90	89	86	
14	TRAS100L-43	F	3	1398	3	6.8	39	-	induct inlet	95	93	94	98	100	95	93	86
									open inlet	94	93	94	98	100	95	93	
									open outlet	94	96	97	101	104	99	97	
15	TRAS100H-43	F	3	1398	5.5	11.9	84	28	induct inlet	98	95	93	95	96	91	93	83
									open inlet	97	95	93	95	96	91	93	
									open outlet	97	98	96	98	100	95	97	

The electrical and sound information in the table is nominal. dBA@3m is hemispherical, free field. Start currents (sc) are DOL other than for motors of 4 kW and above which are star delta. *Motor electrical supply, 1=1 phase (230V, 50Hz) 3=3phase (400V, 50Hz).

TERMINATOR ROOF EXTRACT FANS

PERFORMANCE AND TECHNICAL INFORMATION

TERMINATOR TRC CENTRIFUGAL 21 - 30



ELECTRICAL & SOUND CENTRIFUGAL IMPELLER TRC

CURVE	CODE	COWL SIZE	PHASE	RPM	MOTOR POWER (kW)	FLC (AMPS)	SC (AMPS)	SC ★/▲	INDUCT INLET OPEN INLET OPEN OUTLET	SOUND POWER LEVELS (dB re 10 ⁻¹² W) OCTAVE BAND MID FREQUENCY (Hz)							OPEN INLET/ OUTLET dBA@3m	
										125	250	500	1K	2K	4K	8K		
21	TRCS350-41	A	1	1350	0.31	1.45	5.8	-	induct inlet	83	73	68	60	61	60	65		
									open inlet	78	71	67	60	61	60	65	53	
									open outlet	78	74	70	63	65	64	69	56	
22	TRCS400-41	B	1	1345	0.52	2.4	9.6	-	induct inlet	86	76	71	63	64	63	68		
									open inlet	81	74	70	63	64	63	68	56	
									open outlet	81	77	73	66	68	67	72	59	
23	TRCS500-61	C	1	880	0.45	2.3	9.2	-	induct inlet	82	74	72	67	66	66	73		
									open inlet	79	73	72	67	66	66	73	58	
									open outlet	79	76	75	70	70	70	77	62	
24	TRCS560-61	C	1	835	0.67	3.3	13.2	-	induct inlet	89	78	72	69	69	67	73		
									open inlet	86	77	72	69	69	67	73	60	
									open outlet	86	80	75	72	73	71	77	63	
25	TRCS450-41	B	1	1265	0.74	3.5	14	-	induct inlet	90	80	75	68	69	68	73		
									open inlet	86	79	75	68	69	68	73	61	
									open outlet	86	82	78	71	73	72	77	64	
26	TRCS500-41	C	1	1360	1.35	6.1	24.4	-	induct inlet	91	83	81	76	75	75	82		
									open inlet	88	82	81	76	75	75	82	67	
									open outlet	88	85	84	79	79	79	86	71	
27	TRCS630-63	D	3	885	1.2	2.7	10.5	-	induct inlet	91	82	76	76	74	72	74		
									open inlet	89	81	76	76	74	72	74	64	
									open outlet	89	84	79	79	78	76	78	67	
28	TRCS560-43	C	3	1345	1.9	3.5	14	-	induct inlet	98	87	81	78	78	76	82		
									open inlet	95	86	81	78	78	76	82	69	
									open outlet	95	89	84	81	82	80	86	72	
29	TRCS710-63	D	3	880	1.95	3.9	19.5	-	induct inlet	91	86	79	83	81	78	78		
									open inlet	89	85	79	83	81	78	78	70	
									open outlet	89	88	82	86	85	82	82	73	
30	TRCS630-43	D	3	1370	3.7	6.5	32.5	-	induct inlet	100	91	85	85	83	81	83		
									open inlet	98	90	85	85	83	81	83	73	
									open outlet	98	93	88	88	87	85	87	76	

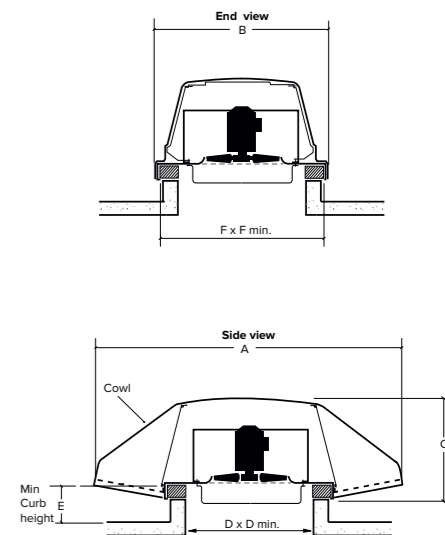
ELECTRICAL & SOUND MIXED FLOW IMPELLER TRM

CURVE	CODE	COWL SIZE	PHASE	RPM	MOTOR POWER (kW)	FLC (AMPS)	SC (AMPS)	SC ★/▲	INDUCT INLET OPEN INLET OPEN OUTLET	SOUND POWER LEVELS (dB re 10 ⁻¹² W) OCTAVE BAND MID FREQUENCY (Hz)							OPEN INLET/ OUTLET dBA@3m	
										125	250	500	1K	2K	4K	8K		
16	TRMS450-61	B	1	860	0.18	1.55	3.5	-	induct inlet	76	74	70	66	66	60	52		
									open inlet	72	72	70	66	66	60	52	54	
									open outlet	72	75	73	69	70	64	56	58	
17	TRMS350-41	A	1	1430	0.25	2.10	9.03	-	induct inlet	74	77	65	68	68	64	55		
									open inlet	69	75	64	68	68	64	55	56	
									open outlet	69	78	67	71	72	68	59	59	
18	TRMS560-61	C	1	850	0.55	6.6	14.8	-	induct inlet	79	82	75	73	72	70	65		
									open inlet	77	81	75	73	72	70	65	61	
									open outlet	77	84	78	76	76	74	69	65	
19	TRMS450-41	B	1	1335	0.55	3.6	10.8	-	induct inlet	79	78	76	75	75	69	61		
									open inlet	75	77	76	75	75	69	61	62	
									open outlet	75	80	79	78	79	73	65	66	
20	TRMS560-43	C	3	1430	1.5	4.4	17.7	-	induct inlet	83	87	81	82	81	79	74		
									open inlet	80	86	81	82	81	79	74	69	
									open outlet	80	89	84	85	85	83	78	73	

The electrical and sound information in the table is nominal. dBA@3m is hemispherical, free field. Start currents (sc) are DOL other than for motors of 4 kW and above which are star delta. * Motor electrical supply, 1=1 phase (230V, 50Hz) 3=3phase (400V, 50Hz).

DIMENSIONS (mm) AND WEIGHT (Kg)

FAN UNITS	COWL SIZE	A	B	C	D (min)	E	F	WEIGHT
TRAS315-41	A	900	620	340	460 sq	150	600 sq	20
TRAS350-41	A	900	620	340	460 sq	150	600 sq	20
TRAS500-41	C	1320	964	475	700 sq	150	945 sq	45
TRAS560-43	C	1320	964	475	700 sq	150	945 sq	45
TRAS560-61	C	1320	964	475	700 sq	150	945 sq	45
TRAS630-43	C	1470	1076	490	800 sq	200	1050 sq	63
TRAS630-61	D	1470	1076	490	800 sq	200	1050 sq	63
TRAS80H-43	E	1780	1170	485	900 sq	250	1136 sq	103
TRAS80L-43	E	1780	1170	485	900 sq	250	1136 sq	103
TRAS100H-43	F	2260	1476	600	1200 sq	250	1452 sq	144
TRAS100H-63	F	2260	1476	600	1200 sq	250	1452 sq	144
TRAS100L-43	F	2260	1476	600	1200 sq	250	1452 sq	144
TRCS350-41	A	900	620	340	460 sq	150	600 sq	20
TRCS400-41	A	1080	740	375	460 sq	150	695 sq	30
TRCS450-41	B	1080	740	375	560 sq	150	695 sq	30
TRCS500-41	C	1320	964	475	700 sq	150	945 sq	51
TRCS500-61	C	1320	964	475	700 sq	150	945 sq	51
TRCS560-43	C	1320	964	475	700 sq	150	945 sq	51
TRCS560-61	C	1320	964	475	700 sq	150	945 sq	51
TRCS630-43	D	1470	1076	490	800 sq	200	1050 sq	82
TRCS630-63	D	1470	1076	490	800 sq	200	1050 sq	82
TRCS710-63	D	1470	1076	490	800 sq	200	1050 sq	82
TRMS350-41	A	900	620	340	460 sq	150	600 sq	23
TRMS450-41	B	1080	740	375	560 sq	150	695 sq	23
TRMS450-61	B	1080	740	375	560 sq	150	695 sq	35
TRMS560-43	C	1320	964	475	700 sq	150	945 sq	53
TRMS560-61	C	1320	964	475	700 sq	150	945 sq	53



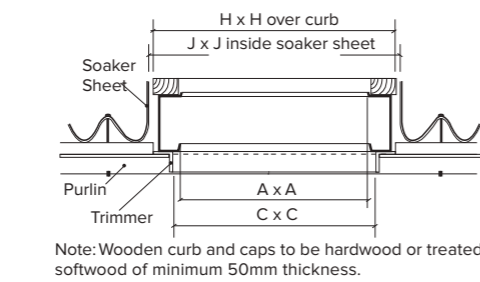
TERMINATOR ROOF EXTRACT FANS

PERFORMANCE AND TECHNICAL INFORMATION

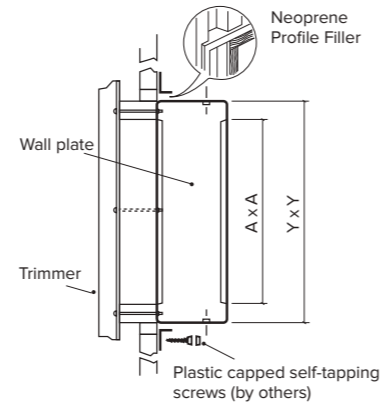
DIMENSIONS (mm)

COWL SIZE	A	B	H	J	K
A	460	475	550	560	150
B	560	575	650	660	150
C	700	775	900	910	150
D	800	900	1000	1010	200
E	900	1000	1100	1110	250
F	1200	1300	1400	1410	250

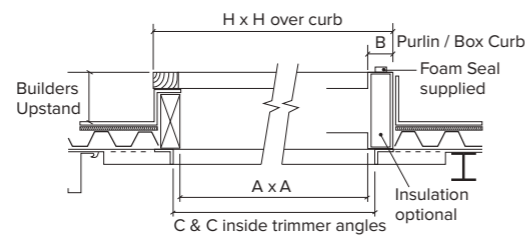
PROFILE ROOF INSTALLATION



VERTICAL PROFILE SHEET INSTALLATION



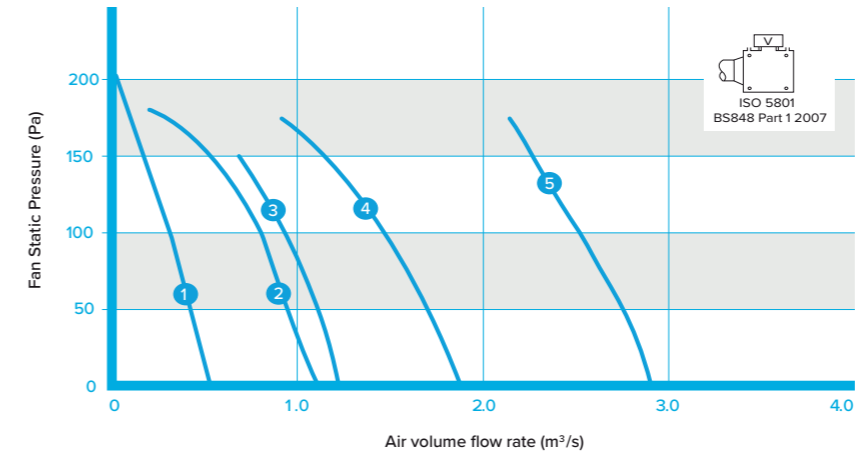
DECKING ROOF INSTALLATION



QUICK SELECTION GUIDE

FAN UNITS	COWL SIZE	ECOSMART CONTROL PACK	SPEED CONTROLS ELECTRONIC	FREQUENCY INVERTER	AUTO TRANSFORMER	DROP IN STANDARD ATTENUATOR	DROP IN LONG ATTENUATOR	ROOF CURB
TRAS315-41	A	-	NSC1-3A	-	SPCON3.5	TRDSS-A	TRDSL-A	PBC-F
TRAS350-41	A	-	NSC1-3A	-	SPCON3.5	TRDSS-A	TRDSL-A	PBC-F
TRAS500-61	C	-	NSC1-6A	-	SPCON3.5	TRDSS-C	TRDSL-C	PBC-C
TRAS560-61	C	-	NSC1-6A	-	SPCON3.5	TRDSS-C	TRDSL-C	PBC-C
TRAS630-61	D	-	NSC1-6A	-	SPCON7.5	TRDSS-D	TRDSL-D	PBC-D
TRAS500-41	C	-	NSC1-6A	-	SPCON7.5	TRDSS-C	TRDSL-C	PBC-C
TRAS560-41	C	-	NSC1-10A	-	SPCON7.5	TRDSS-C	TRDSL-C	PBC-C
TRAS560-43	C	ES-ISC3.3	-	3ISC3.3A	-	TRDSS-C	TRDSL-C	PBC-C
TRAS630-43	D	ES-ISC5.6	-	3ISC5.6A	-	TRDSS-D	TRDSL-D	PBC-D
TRAS80H-43	E	ES-ISC12.5	-	3ISC12.5A	-	TRDSS-E	TRDSL-E	PBC-E
TRAS80L-43	E	ES-ISC5.6	-	3ISC5.6A	-	TRDSS-E	TRDSL-E	PBC-E
TRAS100H-43	F	ES-ISC13.2	-	3ISC13.2A	-	TRDSS-F	TRDSL-F	PBC-F
TRAS100H-63	F	ES-ISC5.6	-	3ISC5.6A	-	TRDSS-F	TRDSL-F	PBC-F
TRAS100L-43	F	ES-ISC7.3	-	3ISC7.3A	-	TRDSS-F	TRDSL-F	PBC-F
TRMS350-41	A	-	NSC1-3A	-	SPCON7.5	TRDSS-A	TRDSL-A	PBC-F
TRMS450-41	B	-	NSC1-6A	-	SPCON7.5	TRDSS-B	TRDSL-B	PBC-B
TRMS450-61	B	-	NSC1-3A	-	SPCON3.5	TRDSS-B	TRDSL-B	PBC-B
TRMS560-43	C	ES-ISC5.6	-	3ISC5.6A	-	TRDSS-C	TRDSL-C	PBC-F
TRMS560-61	C	-	NSC1-10A	-	SPCON7.5	TRDSS-C	TRDSL-C	PBC-C
TRCS350-41	A	-	NSC1-3A	-	SPCON3.5	TRDSS-A	TRDSL-A	PBC-F
TRCS400-41	A	-	NSC1-3A	-	SPCON7.5	TRDSS-A	TRDSL-A	PBC-F
TRCS450-41	B	-	NSC1-6A	-	SPCON7.5	TRDSS-B	TRDSL-B	PBC-B
TRCS500-41	C	-	NSC1-10A	-	SPCON7.5	TRDSS-C	TRDSL-C	PBC-C
TRCS500-61	C	-	NSC1-10A	-	SPCON7.5	TRDSS-C	TRDSL-C	PBC-C
TRCS560-43	C	-	-	-	-	TRDSS-C	TRDSL-C	PBC-C
TRCS560-61	C	-	NSC1-6A	-	SPCON7.5	TRDSS-C	TRDSL-C	PBC-C
TRCS630-43	D	-	-	-	-	TRDSS-D	TRDSL-D	PBC-D
TRCS630-63	D	-	-	-	-	TRDSS-D	TRDSL-D	PBC-D
TRCS710-63	D	-	-	-	-	TRDSS-D	TRDSS-D	PBC-D

TERMINATOR TIA



TIA - Roof mounted input/supply fan is supplied complete with Bird Guards and Motor side Finger guard.

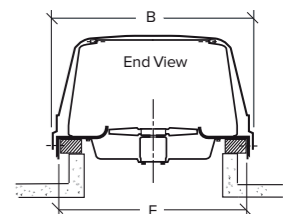
ELECTRICAL & SOUND MIXED FLOW IMPELLER TRM

CURVE	CODE	COWL SIZE	PHASE	RPM	MOTOR POWER (kW)	FLC (AMPS)	SC (AMPS)	OPEN INLET OPEN OUTLET	SOUND POWER LEVELS (dB re 10 ⁻¹² W) OCTAVE BAND MID FREQUENCY (Hz)							OPEN INLET/ OUTLET dBA@3m
									125	250	500	1K	2K	4K	8K	
1	TIA350-421	A	1	1350	0.09	0.85	1.45	I	85	83	75	68	64	58	51	78
								O	78	81	77	72	68	63	54	61
2	TIA400-431	B	1	1350	0.25	1.8	3.6	I	90	92	84	77	73	65	61	87
								O	84	90	86	81	78	71	63	69
3	TIA450-441	B	1	1350	0.25	1.8	3.6	I	88	88	81	76	71	65	56	83
								O	87	92	87	83	80	74	66	72
4	TIA500-451	C	1	1350	0.55	3.6	10.8	I	98	96	88	83	81	74	64	92
								O	96	96	86	87	84	78	69	75
5	TIA630-473	D	3	1350	1.5	4.4	17.7	I	101	98	92	88	86	79	73	95
								O	101	98	93	95	91	86	77	81

I = Open Inlet O = Open Outlet. The electrical and sound information in the table is nominal. *Open outlet dBA@3m input/supply.

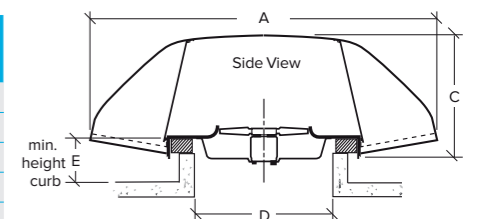
DIMENSIONS (mm) AND WEIGHT (Kg)

CODE	A	B	C	D (min)	E	F	WEIGHT
TIA350-421	900	620	340	460 sq	150	600 sq	20
TIA400-431	1080	740	375	560 sq	150	695 sq	30
TIA450-441	1080	740	375	560 sq	150	695 sq	30
TIA500-451	1320	964	475	700 sq	150	945 sq	45
TIA630-473	1470	1076	490	800 sq	200	1050 sq	63



QUICK SELECTION GUIDE

FAN CODE	DROP IN STANDARD ATTENUATOR	DROP IN LONG ATTENUATOR	ROOF CURB
TIA350-421	TRDSS-A	TRDSL-A	PBC-F
TIA400-431	TRDSS-B	TRDSL-B	PBC-B
TIA450-441	TRDSS-B	TRDSL-B	PBC-B
TIA500-451	TRDSS-C	TRDSL-C	PBC-C
TIA630-473	TRDSS-D	TRDSL-D	PBC-D



Soaker sheets and flashing plates are available to suit all roof profiles. Contact Nuair for details.

TERMINATOR ROOF EXTRACT FANS

PERFORMANCE AND TECHNICAL INFORMATION

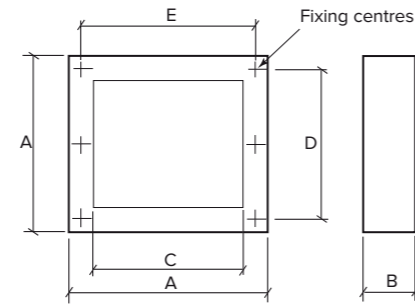
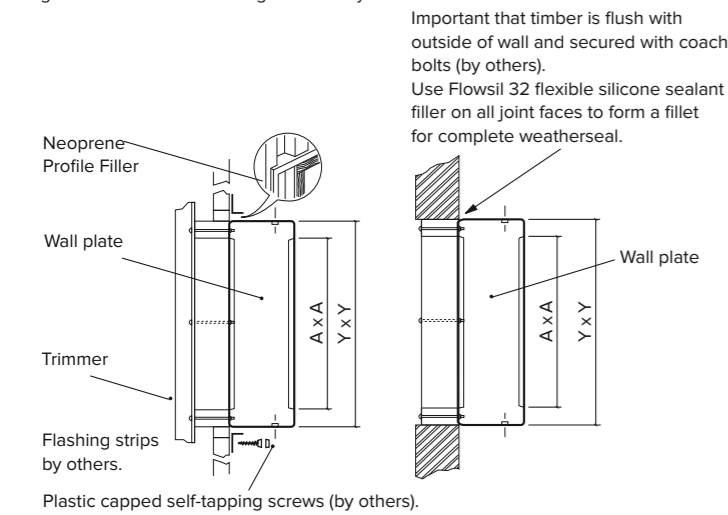
DIMENSIONS (mm)

CODE	A	B	C	D	E
A	550	250	400	369*	475
B	650	250	500	470*	575
C	900	250	700	610*	825
D	1000	250	800	690**	900

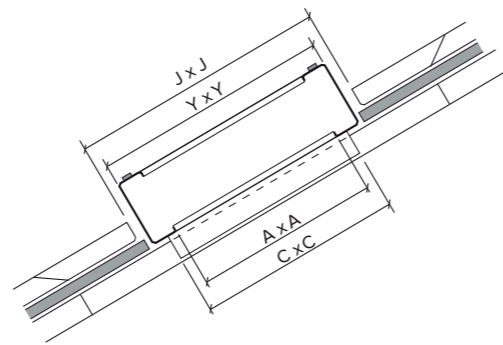
* Three holes equally spaced. ** Four holes equally spaced.

WALL MOUNTING KITS

Note: unit must be installed using the appropriate wall mounting plate and with the longer cowl dimension running horizontally.

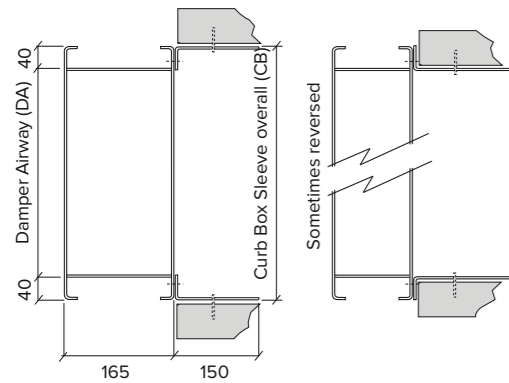


ROOF PROFILE PREPARED TO ACCEPT A PURLIN BOX CURB



Note: Details of Terminator Cowl and Supply/Extract Cowl can be found on page XX.

TERMINATOR DAMPERS

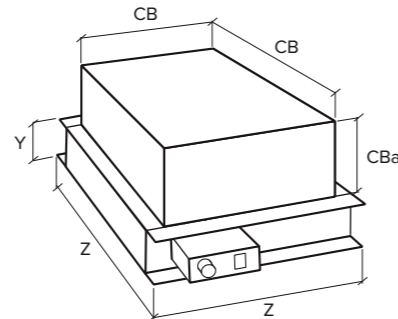


DAMPER DIMENSIONS (mm) AND WEIGHT (Kg)

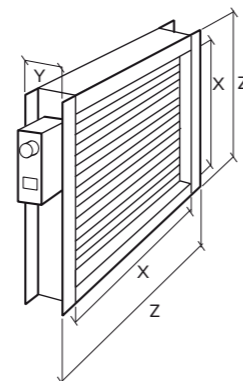
CODE	X	Y	Z	CB	Cba	WEIGHT
TRDM-A	390	105	470	454	150	11
TRDM-B	490	105	570	551	150	14
TRDM-C	690	105	770	691	150	20
TRDM-D	800	105	880	793	150	25
TRDM-E	900	105	980	891	150	28
TRDM-F	1200	105	1280	1191	150	31

Damper motor fitted is "Motor open/Motor closed".
For Motor open/Spring Return option add 'S' after terminal size e.g. TRDM-A-S.

BUILT UP DAMPER UNIT AND CURB BOX SLEEVE



MOTORISED DAMPER UNIT



STANDARD ATTENUATOR DIMENSIONS (mm) AND WEIGHT (Kg)

COWL	CODE	TYPE	SIZE	A	B	C	E	WEIGHT	Z
A	TRDSS-A	Standard	315	550	450	670	12	30	47
A	TRDSS-A	Standard	350	550	450	670	12	30	47
B	TRDSS-B	Standard	400	650	550	825	16	46	38
B	TRDSS-B	Standard	450	650	550	825	16	46	38
C	TRDSS-C	Standard	500	790	690	720	16	53	32
C	TRDSS-C	Standard	560	790	690	720	16	53	32
D	TRDSS-D	Standard	630	880	780	720	24	66	12.4
E	TRDSS-E	Standard	800	980	880	720	24	66	8.6
F	TRDSS-F	Standard	1000	1280	1180	800	32	170	2.6

Standard Attenuator Insertion Losses

FREQUENCY Hz	125	250	500	1K	2K	4K	8K
Dynamic Attenuation (dB)	-5	-8	-13	-20	-21	-18	-14

LONG ATTENUATOR DIMENSIONS (mm) AND WEIGHT (Kg)

COWL	CODE	TYPE	SIZE	A	B	C	E	WEIGHT	Z
A	TRDSL-A	Long	315	550	450	1120	12	40	47
A	TRDSL-A	Long	350	550	450	1120	12	40	47
B	TRDSL-B	Long	400	650	550	1275	16	74	38
B	TRDSL-B	Long	450	650	550	1275	16	74	38
C	TRDSL-C	Long	500	790	690	1170	16	85	32
C	TRDSL-C	Long	560	790	690	1170	16	85	32
D	TRDSL-D	Long	630	880	780	1170	24	104	12.4
E	TRDSL-E	Long	800	980	880	1170	24	104	8.6
F	TRDSL-F	Long	1000	1280	1180	1250	32	281	2.6

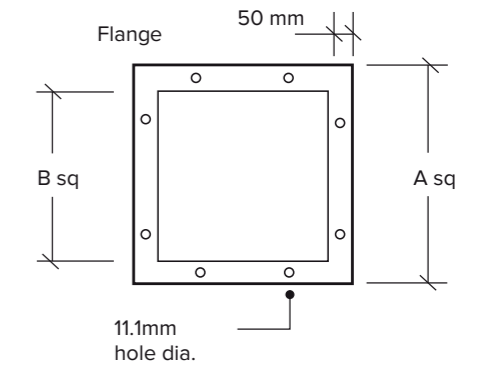
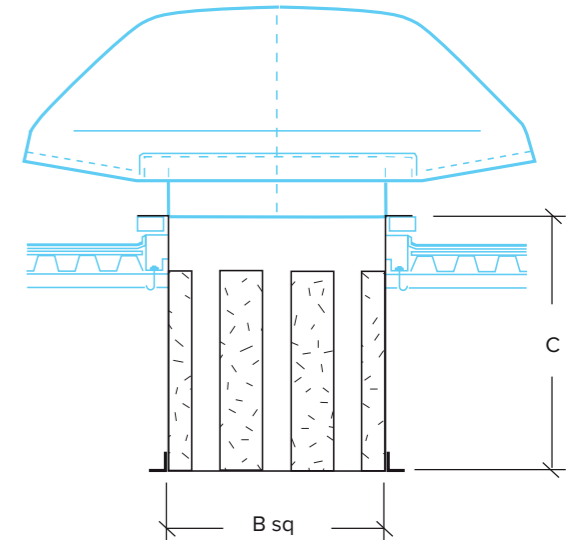
Long Attenuator Insertion Losses

FREQUENCY Hz	125	250	500	1K	2K	4K	8K
Dynamic Attenuation (dB)	-10	-16	-26	-40	-40	-35	-26

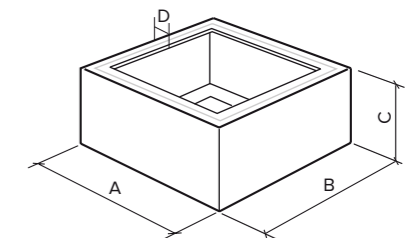
PREFABRICATED CURB DIMENSIONS (mm)

CODE	A	B	C	D
PBC A	550	550	250	45
PBC B	650	650	250	45
PBC C	900	900	250	100
PBC D	1000	1000	250	100
PBC E	1100	1100	350	100
PBC F	1400	1400	325	100

Dims internal or external. Manufactured in galvanised steel these curbs will reduce design work and guarantee correct unit mounting when on site.
Note: Upper faces of curb are fitted with robust sealing strip.



Note: Air Pressure Drop of Attenuator (Pa) = Z x Q²
where Z = Factor listed in table. Q = Air Volume Flow Rate (m³/s)

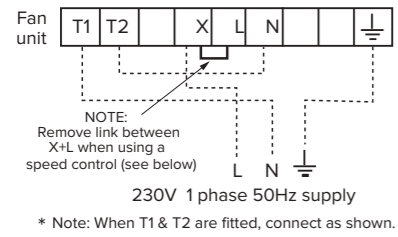


TERMINATOR ROOF EXTRACT FANS WIRING

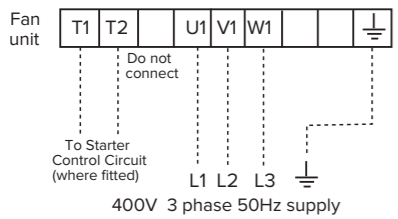
TERMINATOR ROOF EXTRACT FANS CONTROLS

WIRING FOR TERMINATOR TRA, TRM, TRC AND TIA UNITS (EXCEPT TRA 100H-43)

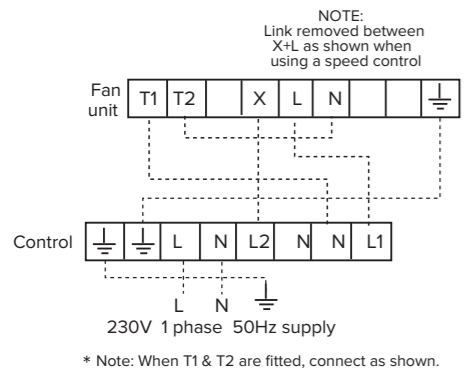
(SINGLE PHASE UNITS - 3 WIRE SUPPLY) SINGLE SPEED 1 PHASE



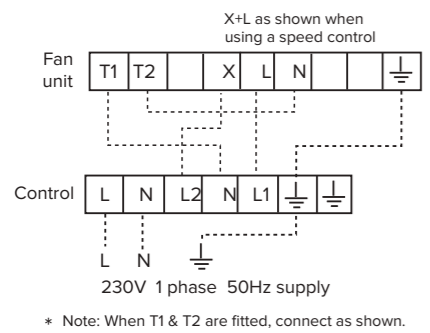
SINGLE SPEED 3 PHASE



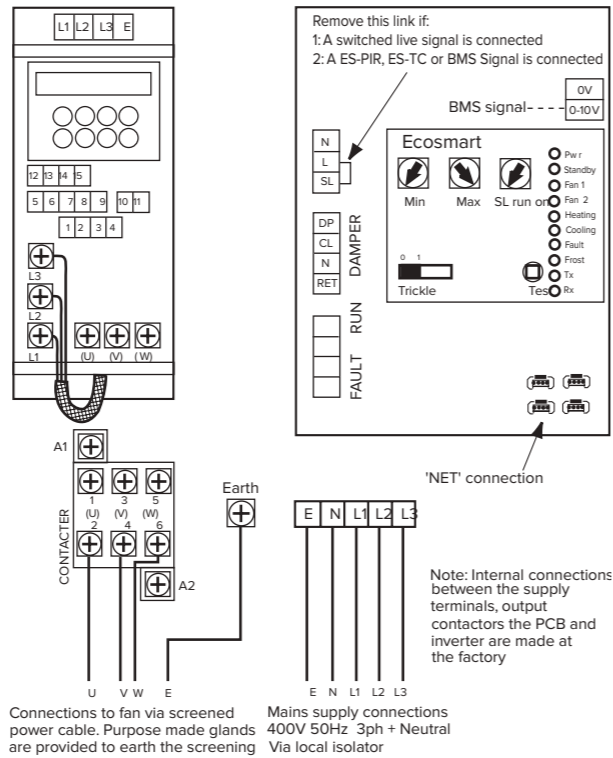
SPEED CONTROL, TRANSFORMER 1 PHASE



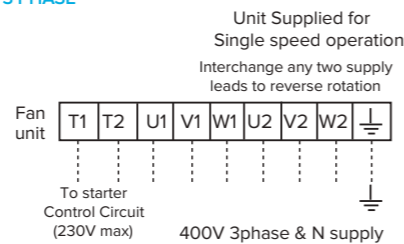
(SINGLE PHASE UNITS - 3 WIRE SUPPLY) SPEED CONTROL, ELECTRONIC 1 PHASE



ECOSMART



TRA100H-43 3 PHASE



Unit Wiring

The terminator range of units are pre-wired from the motor to an enclosed terminal box. On TRA (axial) models this box is located at the end of a 600mm long flexible conduit which hangs underneath and is fixed to a convenient surface by the installer. These units will require bottom access to complete wiring.

On TRM (mixed flow) and TRC (centrifugal) models the box is located on the fan plate or motor bridge inside the cowl. On these units it will be necessary to remove the cowl to gain access.

When wiring in the unit take care to avoid rotating components and also gravity shutters. 20mm holes are provided in the fan base plate to bring wiring out from inside the building.

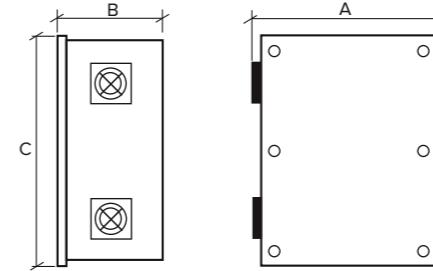
Connection details

Check that the electrical supply is compatible with the unit (see unit rating plate). Connection details are supplied with speed controls.

All wiring must be carried out in accordance with regulations for electrical installations and comply with the requirements of the local supply authority.

Ensure that the direction of rotation is correct. Single phase units are checked during manufacture for correct rotation. Three phase units must be tested on site and, if incorrect, interchange any two supply leads to reverse impeller direction.

ECOSMART CONTROL DIMENSIONS (mm)

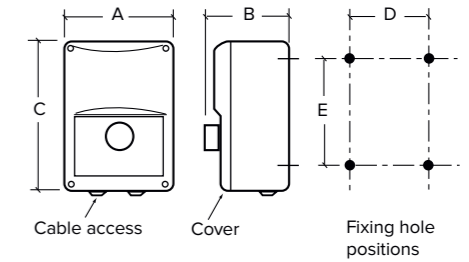


CODE	A	B	C	WEIGHT
ES-ISC1.2A	325	230	410	6
ES-ISC2.1A	325	230	410	6
ES-ISC3.0A	325	230	410	6
ES-ISC4.0A	325	230	410	6
ES-ISC5.9A	390	290	455	14
ES-ISC7.7A	390	290	455	14
ES-ISC10.2A	390	290	455	14
ES-ISC13.2A	390	290	455	20
ES-ISC18.4A	390	290	455	20
ES-ISC26.0A	390	290	455	20
ES-ISC38.0A	525	290	805	40

Please note:

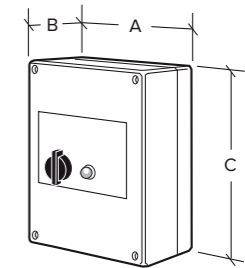
- The mains power supply to the controller must be appropriately sized and installed via a local isolation switch (by others). The isolator must also accommodate the switched live (if used). The mains supply from the ecosmart controller to the fan must be appropriately sized, not exceeding 25 metres and must be a screened power cable, earthed at both ends. A four point glanding plate is formed from the base of the control and in order to main EMC compliance, a Zerohm EMC glanding kit is supplied.
- An isolator should be located adjacent to the fan.
- Contra and run and standby fans will require two controls, one for each fan.
- All integrated sensors plug directly into the control panel.
- Refer to product datasheet No. 671193 for further information.

ELECTRONIC SPEED CONTROL DIMENSIONS (mm)



CODE	A	B	C	D	E	WEIGHT
NSC1-3A	83	88	180	71	108	0.5
NSC1-6A	115	95	195	98	140	0.7
NSC1-10A	115	95	195	98	140	0.7

The electronic speed controllers provide infinitely variable speed control from preset minimum to maximum. All models feature a boost start function, which applies maximum power to the motor for a few seconds to prevent motor stalling before returning to selected speed. Wiring to the motor can be either 2-wires or 3-wires control depending on the motor design. The enclosures for ESC1-3A and ESC1-6A are rated to IP45 with the ESC1-10A rated at IP54. All controllers meet LVD and EMC directives for safety and electromagnetic compatibility.



ELECTRONIC SPEED CONTROL DIMENSIONS (mm)

Single Phase

CODE	A	B	C	WEIGHT
SPCON1.5	115	85	180	1.7
SPCON3.5	200	140	280	3.6
SPCON7.5	200	140	280	6

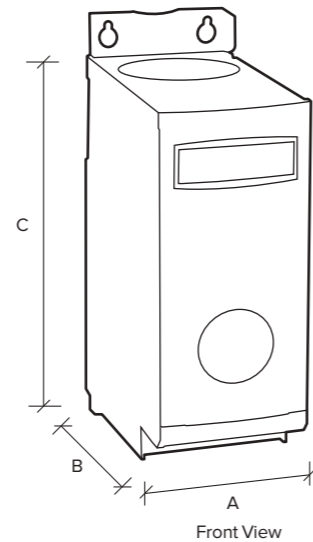
Autotransformers having class 'F' insulation are used to provide discrete voltage steps. All models are fitted with suitable fuses for short-circuit protection. The controller casing is manufactured from plastic pre-coated steel or impact resistant polycarbonate. All models are suitable for indoor installations only. All controllers meet LVD and EMC directives for safety and electromagnetic compatibility. Transformer speed controls produce a pure sine wave output resulting in quiet motor operation. Transformer controls are therefore preferred for noise sensitive applications.

TERMINATOR ROOF EXTRACT FANS CONTROLS

INVERTER SPEED CONTROL



DIMENSIONS (mm)



These are a range of frequency inverters for controlling the speed of 3 phase AC motors. Standard range are 400V 3 phase input units covering motor rating from 0.75kW to kW. Higher ratings and single phase input models are available upon request.

The inverters are microprocessor controlled and use state of the art Insulated Gate Bipolar Transistor (IGBT) technology. This makes them reliable and versatile. A special pulse-width modulation method with selectable pulse frequency permits quiet motor operation.

Comprehensive protective functions provide excellent inverter and motor protection.

The inverters default factory settings, is ideal for a large range of simple motor control applications. The inverters can also be used for more advanced motor control applications via its comprehensive parameter lists. The inverters can be used in both 'stand alone' applications as well as being integrated into 'Automation systems'.

CODE	MOTOR Kw	A	B	C	WEIGHT
3ISC1.2A	0.37	70	142	280	1.5
3ISC1.9A	0.35	70	142	280	1.5
3ISC2.4A	0.75	70	142	280	1.7
3ISC3.3A	1.1	70	142	280	1.7
3ISC4.1A	1.5	70	142	280	1.7
3ISC5.6A	2.2	70	142	280	1.7
3ISC7.3A	3	70	142	280	1.7
3ISC8.8A	4	70	142	280	1.7
3ISC12.5A	5.5	169	177	299	3.5
3ISC15.6A	7.5	169	177	299	3.5
3ISC23.1A	11	169	177	299	3.5
3ISC31.0A	15	260	177	320	5
3ISC38.0A	18.5	260	177	320	5
3ISC44.0A	22	260	177	320	5
3ISC59.0A	30	260	177	320	24
3ISC72.0A	37	260	177	320	24
3ISC87.0A	45	260	177	320	24

CODE DESCRIPTIONS

3 ISC 1.2A

| | |
1 2 3

- 3 Phase supply
- Inverter Speed Control
- Output Current Rating

QUIETSCROLL CONSULTANT SPECIFICATION

FAN DESCRIPTION

The Roof mounted extract/supply fans shall be located in the positions indicated on the drawings and in accordance with the relevant fan schedule. It shall be a low profile cowl manufactured in flame retardant GRP.

The fan shall be of the Terminator type and shall be supplied complete with backdraught shutters, birdguard, purlin box curb, hand guard, specific details of the curb and and purlin to be confirmed by the main contractor.

The mechanical contractor shall make due allowance for supporting the fan via the provision of purpose made trimmers between purlin.

The trimmers shall be sized to adequately support the weight of the fans.

The fan unit shall have a 3 year warranty, first year parts and labour the remainder parts only.

Ecosmart Terminator shall have a 5 year warranty, first year parts and labour the remainder parts only.

The unit and ancillaries shall be of the Terminator type as manufactured by Nuair Ltd.

CONTROL SPECIFICATION

The fan unit can be supplied with one of the following control options:-
1. Ecosmart controls (3 phase only).

The compact Ecosmart control system complete with all necessary controls to facilitate the operation of the ventilation system. It shall be come complete with an integral factory fitted Ecosmart PCB which will control the fan unit within the desired design parameters and provide the interface between all external control devices and the unit itself.

The fan unit shall have the following energy saving components integrally mounted, pre-wired to interface with the purpose made PCB, all components pre-wired, configured and factory fitted by the manufacturer:

- Integral Frequency inverter/speed controller.
- Integral maximum and minimum speed adjustment for commissioning.
- Integral adjustable run on timer.
- Integral BMS interfaces – 0-10V speed adjustment.
- Integral BMS interfaces – Volt free failure and status indication.
- Integral background ventilation switch (trickle switch).
- Multiple IDC sockets for interconnection of sensors or fans using pre-plugged 4-core low voltage cable.

ECOSMART SYSTEM OPERATION

The Ecosmart controls will enable the unit to automatically vary its speed as it receives signals from one of the interconnected sensors. When the signal is received the fan shall either increase speed gradually until the required level is achieved or it will work on a trickle and boost principle. This will then move the fan duty point from trickle/background ventilation rate to the required boost ventilation rate. Both the trickle and boost rates are infinitely variable, easy to adjust and remove the need of a main balancing damper.

2. BMS INTERFACES

The fan unit can be provided with the following integrated BMS interfaces:

- 0 - 10 volt contacts to provide a full BMS interface. This will enable the following functions:-
 - Switch the unit on/off.
 - Switch from low speed to high speed.
 - Full speed control facility.
- 2 No. Volt free contacts to provide fan run and failure indication to provide system status.
- An integrated commissioning/speed control to accurately commission the system, with minimum and maximum speeds easily adjusted via a miniature dial, as recommended in Part L. This will enable the unit to be configured to run between set parameters thus saving motor power and limiting noise.

3. COMMISSIONING SET UP

The fan unit can be provided with an integrated commissioning/speed control to accurately commission the system, as recommended in Part L, minimum and maximum speeds easily adjusted via miniature dial. The commissioning set up facility directly controls the integrated speed control/frequency inverter.

4. STANDARD CONTROLS

The unit shall be provided with a standard speed control or starter in accordance with the manufacturers recommendations.

- Terminator has a 3 year warranty.
- Ecosmart Terminator has a 5 year warranty.
- All equipment shall be as manufactured by Nuair Ltd.

TERMINATOR ROOF EXTRACT FANS ROOF COWLS AND TERMINALS

To provide a weatherproof route for supply & exhaust air to your ducted system.

Cowls are manufactured from flame retardant polymer and can be supplied with gravity backdraught shutters, bird guards and hand guards. The terminal is finished in BS00A05 Grey as standard. All BS or RAL colours are available. The cowl will normally be fitted to the upstand by a roofing contractor or builder. The Cowl can be fitted without shutters on a 0-60 degree pitched roof with its longer side running down the roof slope. The Cowl can be fitted with its longer side running across a slope of less than 85 degrees from the horizontal. When fitted to a wall the longer side must run horizontal.

Typical code: **TRTS-A**

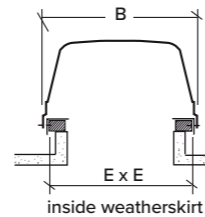
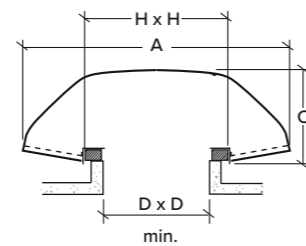
Note: S = Shutters

Note: Air Pressure Drop of Cowl (Pa) = Z x Q²

where Z = Factor listed in table below Q = Air Volume Flow Rate (m³/s)

TERMINATOR COWLS DIMENSIONS (mm) AND WEIGHT (Kg)

CODE	A	B	C	D	E	H	WEIGHT	Z EXTRACT	Z INTAKE
TRTS-A	900	620	340	460	600	550	16.3	67	118
TRTS-B	1080	740	375	560	695	650	20.7	39	87
TRTS-C	1320	964	475	700	945	900	34.4	28	62
TRTS-D	1470	1076	490	800	1050	1000	39.2	19	32
TRTS-E	1780	1170	485	900	1136	1100	66.8	7	11.3
TRTS-F	2260	1476	600	1200	1452	1400	114	2.5	3.6



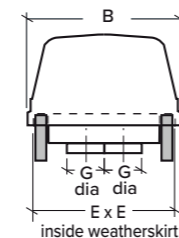
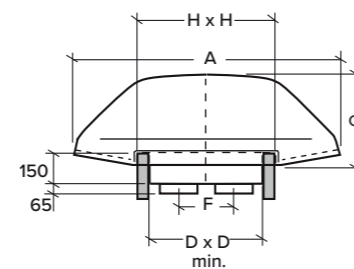
Supply/Extract Cowl: rigid flame retardant cowl, conforming with BS476 (Part 1 class 1f) supplied in grey (BS 00 A 05) as standard (any BS or RAL colours available), fixing directly to the base using non-rusting sealed fixings. Air plenum is manufactured from galvanised steel incorporating supply & extract chambers. Rigid spigots are provided for connection of duct work. Supply & extract chamber is fitted with a bird guard.

Typical code: **TRSE1**

SUPPLY/EXTRACT COWLS DIMENSIONS (mm) AND WEIGHT (Kg)

CODE	A	B	C	D	E	F	G	H	WEIGHT
TRSE1	900	620	340	460	600	200	100	550	21.3
TRSE2	900	620	340	460	600	200	125	550	21.3
TRSE3	900	620	340	460	600	200	150	550	21.3
TRSE4	1320	964	475	700	945	345	200	900	41.4
TRSE5	1320	964	475	700	945	345	250	900	41.4
TRSE6	1320	964	475	700	945	345	315	900	41.4
TRSE7	1780	1170	489	900	1150	450	400	1100	76.8

Resistance to airflow of this item is negligible.



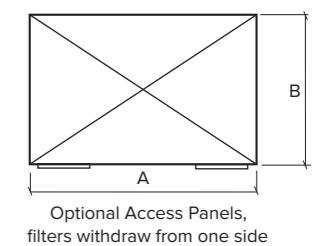
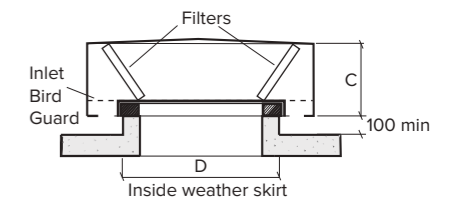
Low profile terminals are to be supplied by Nuaire. The terminal is to be rectangular, constructed in aluminium alloy and with non-rusting fixings. Twin inlets fitted with inlet/bird guards and an integral weather skirt. Filtered units are to be fitted with filter frames for removal and replacement of BS2831 and BS2963 filters.

Typical code: **630LPDT/1 - Disposable Filter. 630LPWT/1 - Washable Filter.**

FILTERED TERMINALS DIMENSIONS (mm) AND WEIGHT (Kg)

CODE	A	B	C	D	WEIGHT	Z EXTRACT	Z INTAKE
630LP*T/1	1250	700	280	690	15.1	67	106
800LP*T/1	1390	800	350	790	25.2	51	88
1400LP*T/1	2620	1800	600	1440	91.0	3.3	6.5

Note: * D = Disposable * W= Washable



Low profile terminals are to be supplied by Nuaire. The terminal is to be rectangular, constructed in aluminium alloy and with non-rusting fixings. Twin inlets fitted with inlet/bird guards and an integral weather skirt.

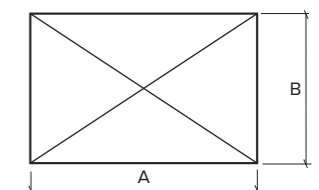
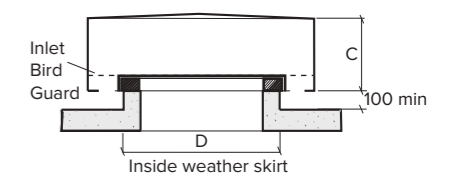
Typical code: **315LPT/1**

Note: Air Pressure Drop of Cowl (Pa) = Z x Q²

where: Z = Factor listed in table below Q = Air Volume Flow Rate (m³/s)

NON-FILTERED TERMINALS DIMENSIONS (mm) AND WEIGHT (Kg)

CODE	A	B	C	D	WEIGHT	Z EXTRACT	Z INTAKE
315LPT/1	615	400	150	390	3.5	553	614
400LPT/1	745	500	165	490	5.8	222	296
500LPT/1	915	600	200	590	8.1	105	117
630LPT/1	1350	700	280	690	12.6	48	29
800LPT/1	1390	800	350	790	23.5	32	21
1000LPT/1	1820	1050	420	1040	29.8	13	10
1120LPT/1	2070	1150	500	1140	35.0	6.5	4.6
1250LPT/1	2204	1250	540	1240	41.0	5	4
1400LPT/1	2620	1800	600	1440	65.0	1	1





COMMERCIAL

WWW.NUAIRE.CO.UK/COMMERCIAL



RESIDENTIAL

WWW.NUAIRE.CO.UK/RESIDENTIAL



INTERNATIONAL

WWW.NUAIRE.CO.UK/INTERNATIONAL



WESTERN INDUSTRIAL ESTATE | CAERPHILLY | CF83 1NA
T 029 2085 8200 **F** 029 2085 8300 **E** INFO@NUAIRE.CO.UK
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Part no. 672090
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