

SMOKE EXTRACTION



REFLEX[®]

RANGE

F400-120 approved turrets
Air flow from 300 to 18 000 m³/hr
under pressures of 50 to 700 Pa
NF EN 12101-3 compliant

REFLEX[®]C



REFLEX[®]H



REFLEX[®]V





REFLEX® C

(open air discharge)

REFLEX® H

(Directed horizontal discharge)

REFLEX® V

(Vertical discharge)

Approved CSTB F400-120 / NF EN 12101-3

Marking EC ventilators extractors of smokes and heat

- New and innovative design
- Air flow from 300 to 18 000 m³/h
- Pressures from 50 to 700 Pa

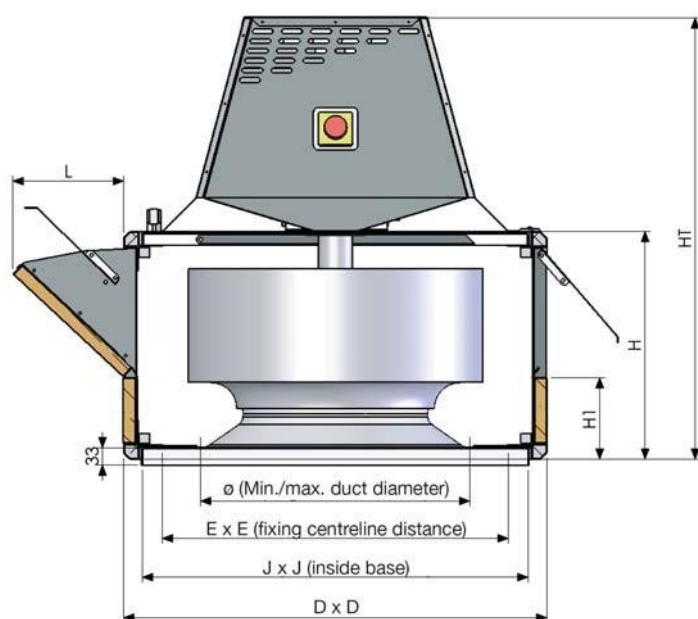
Available in the following versions:

- single phase 230 V, variable speed
- three-phase 230/400 V, 1 speed
- 400 V three-phase, 2 speed



Certificate number
0679 - CPR - 0949

Dimensions



Designation	D (mm)	E (mm)	J (mm)	Ømini (mm)	Ømaxi (mm)	H (mm)	H1 (mm)	HT (mm)	L (mm)
REFLEX® 280	620	472	549	250	450	222	51	523	103
REFLEX® 315	620	472	549	250	450	231	60	532	103
REFLEX® 355	620	472	549	315	450	259	84	560	103
REFLEX® 400	620	472	549	355	450	316	141	617	103
REFLEX® 450	811	623	739	400	560	340	62	751	211
REFLEX® 500	811	623	739	400	560	406	126	817	211
REFLEX® 560	811	623	739	500	560	437	157	848	211
REFLEX® 630	1101	893	1009	560	800	487	106	1008	300
REFLEX® 710	1101	893	1009	630	800	548	167	1069	300
REFLEX® 800	1101	893	1009	710	800	601	220	1122	300

General information

- **Base:** in square-section heavy gauge galvanized steel sheet with a stamped out intake cone. Fixing hole on each corner.
- **Structure:** supporting frame in aluminium with lifting rings fixed at the ends.
- **Motor fan support:** galvanized steel plate strengthened by raised edges.
- **Wheel:** galvanized steel reaction impeller (high performance and easy to clean), statically balanced. Aluminium hub
- **Motor:** B3 motor, protection IP 55 class F.
 - 230V, 50Hz Single-phase motor with permanent condenser.
 - 1 speed 230/400V 50 or 60 Hz three-phase motor.
 - 2-speed, 400V 50Hz three-phase motor, Dahlander winding (4/8 and 6/12P), independent windings (4/6 and 6/8P).
- **Motor cover:** in RAL 7035 pre-lacquered 10/10 metal sheet - fitted with motor ventilation louvres. Location provided for padlockable switch, mounted as standard.
- **Protection grilles:** in galvanised steel.
- **Versions:**

- **REFLEX® C:** Traditional turret with horizontal outlet to the open air fitted as standard with a protection mesh in galvanized steel and a built-in tilting kit.

- **REFLEX® H:** Same as C version, fitted in addition with a shutter system in RAL7035 pre-lacquered aluminium providing acoustic attenuation by virtue of a band fixed around the periphery in very high density 25mm - 120 kg/m³ mineral wool. Besides the acoustic function, this shutter allows the horizontal direction of the air to be adjusted as well as providing a non-return valve action thus meeting the requirements and recommendations of RT 2005.

- **REFLEX® V:** Ditto version C fitted in addition with a vertical outlet kit with 4 fixed faces insulated as standard with very high density 25 mm - 120 kg/m³ mineral wool to provide powerful acoustic attenuation. The shutters in RAL 7035 aluminium close when the device is not operating and provide a non-return valve function. Complies with with RT 2005.



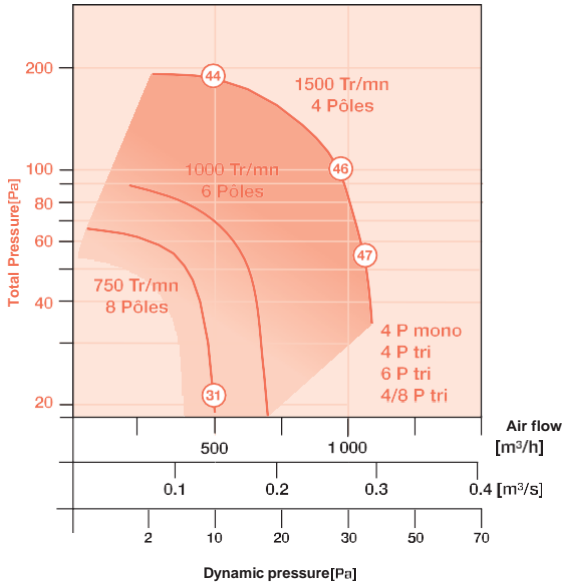
Turret model	Motor type	Motor power kW	Rated current A	Variant	Turret weight (kg)		
					C	H	V
REFLEX® 280	MONO	0,25	2,15	VATM 2,2 - CATM 022	37	39	43
	A6	0,18	0,64	VFM/T 037	38	40	44
	B4	0,37	0,96	VFM/T 037	39	41	45
	B48	0,37 / 0,09	1,1 / 0,5	-	39	40	44
REFLEX® 315	MONO	0,25	2,15	VATM 2,2 - CATM 022	37	39	43
	A6	0,18	0,64	VFM/T 037	38	40	44
	B4	0,37	0,96	VFM/T 037	39	41	45
	B48	0,37 / 0,09	1,1 / 0,5	-	39	41	45
REFLEX® 355	MONO	0,25	2,15	VATM 2,2 - CATM 022	38	42	46
	A6	0,18	0,64	VFM/T 037	39	43	47
	B4	0,37	0,96	VFM/T 037	40	44	48
	B48	0,37 / 0,09	1,1 / 0,5	-	40	44	49
REFLEX® 400	MONO	0,37	2,91	VATM 5 - CATM 050	41	45	49
	A6	0,18	0,64	VFM/T 037	42	46	50
	B4	0,37	0,96	VFM/T 037	43	47	51
	B48	0,37 / 0,09	1,1 / 0,5	-	43	47	51
REFLEX® 450	A68	0,25 / 0,10	0,95 / 0,65	-	64	68	78
	B6	0,37	1,04	VFM/T 037	65	69	79
	B612	0,4 / 0,08	1,2 / 0,7	-	64	68	78
	D4	0,75	1,8	VFM/T 075	66	70	80
	D46	0,78 / 0,3	2,0 / 1,0	-	66	70	80
	D48	0,75 / 0,17	2,1 / 0,77	-	66	70	80
REFLEX® 500	A8	0,18	0,75	VFM/T 037	68	75	85
	B6	0,37	1,04	VFM/T 037	68	75	85
	B612	0,4 / 0,08	1,2 / 0,7	-	68	75	85
	B68	0,33 / 0,14	1,05 / 0,8	-	69	76	86
	F4	1,5	3,4	VFM/T 1K5	75	82	92
	F46	1,5 / 0,45	3,5 / 1,6	-	75	82	92
	F48	1,7 / 0,35	4 / 1,6	-	74	81	91
REFLEX® 560	B8	0,37	1,6	VFM/T 037	75	82	92
	D6	0,75	2	VFM/T 075	75	82	92
	D612	0,75 / 0,12	2,3 / 0,9	-	78	85	95
	D68	0,7 / 0,3	2,2 / 1,5	-	78	85	95
	G4	2,2	4,7	VFM/T 2K2	83	90	100
	G46	2,5 / 0,8	5,5 / 2,5	-	82	89	99
	G48	2,3 / 0,5	5,2 / 1,9	-	83	90	100
REFLEX® 630	D8	0,75	2,2	VFM/T 075	137	146	164
	E612	1,3 / 0,2	3,5 / 1,2	-	133	141	160
	E68	1,2 / 0,5	3,5 / 2,1	-	133	141	160
	F6	1,5	3,7	VFM/T 1K5	133	142	160
REFLEX® 710	E8	1,1	3,2	VFM/T 1K1	141	152	170
	G6	2,2	5,3	VFM/T 2K2	145	156	174
	G612	2,2 / 0,37	5,5 / 2,2	-	151	162	180
REFLEX® 800	G8	2,2	6,7	VFM/T 2K2	172	185	203
	I6	4	10	VFT 4K0	172	185	203
	I68	4 / 1,7	9,5 / 5,4	-	190	202	221
	I612	4 / 0,75	9,4 / 3,4	VFT 4K0	190	202	221

The SINGLE PHASE versions are not F400-120 approved - they are for comfort use.

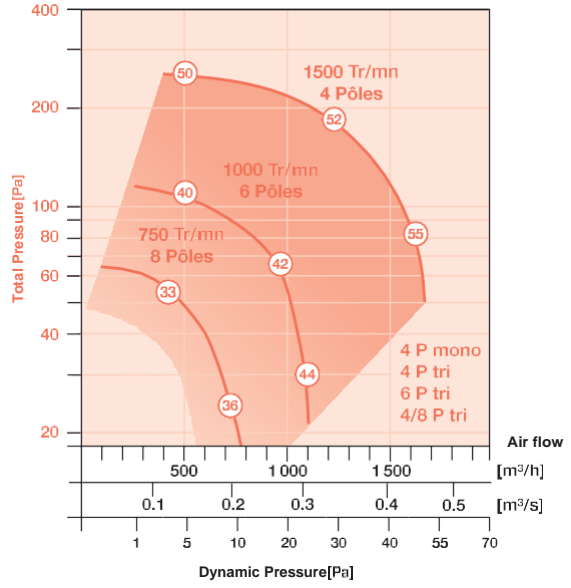
Speed regulation may be provided, factory-prewired under the motor housing. In the VFT version (see page 255), the factory-fitting and wiring of the speed controller via a CDF relay unit is F400-120 / NF EN 12101 -3 approved for comfort/smoke extraction applications.



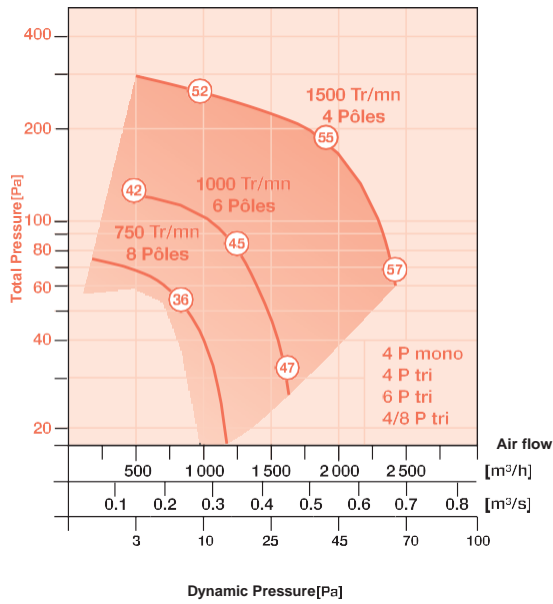
REFLEX® 280



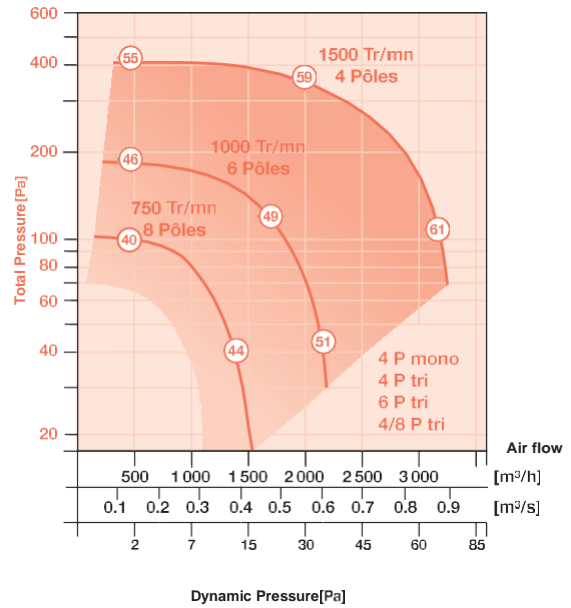
REFLEX® 315



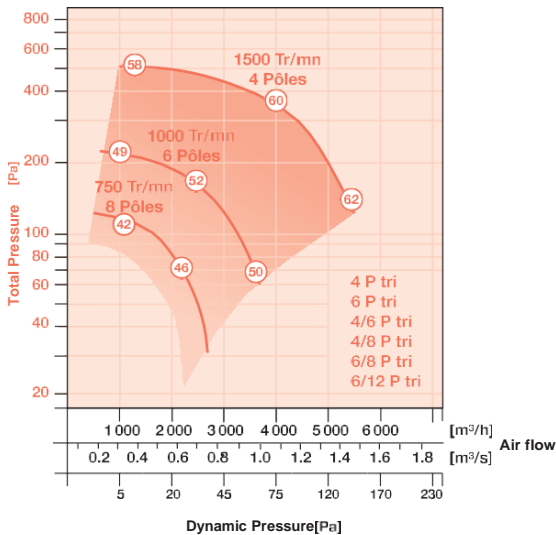
REFLEX® 355



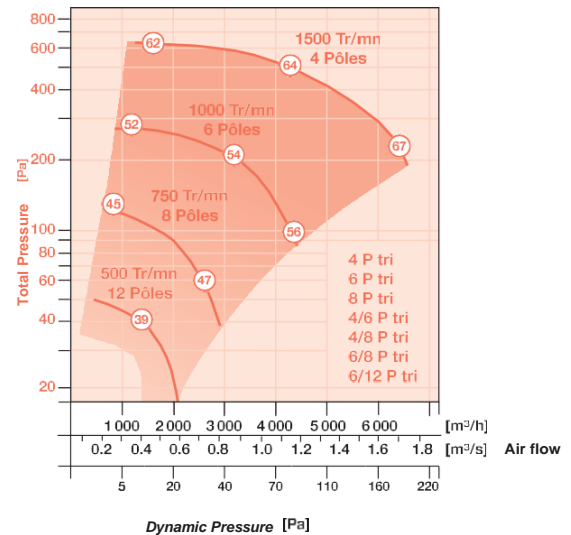
REFLEX® 400



REFLEX® 450

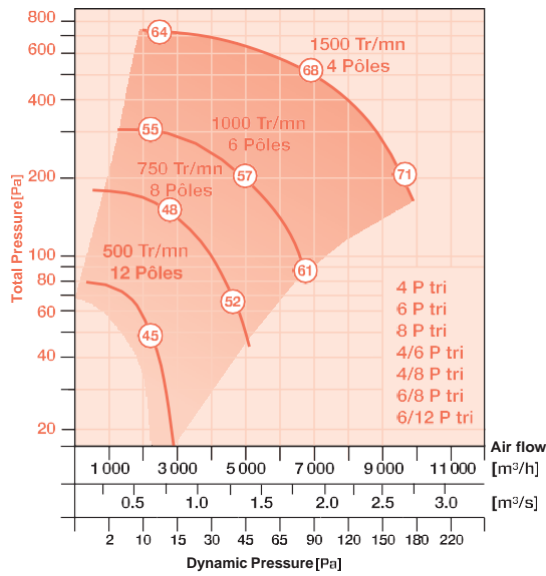


REFLEX® 500

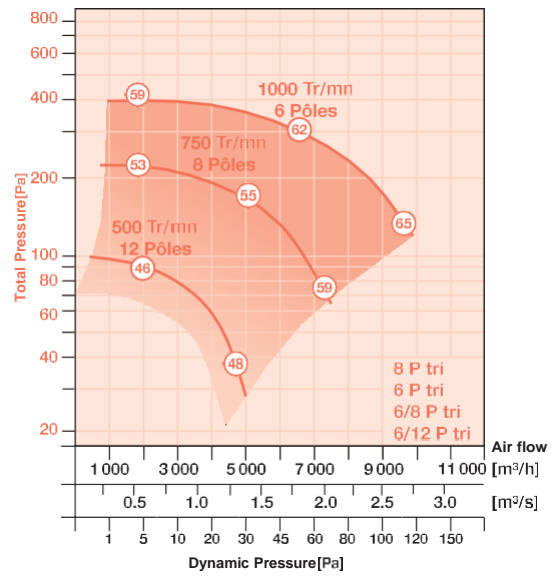




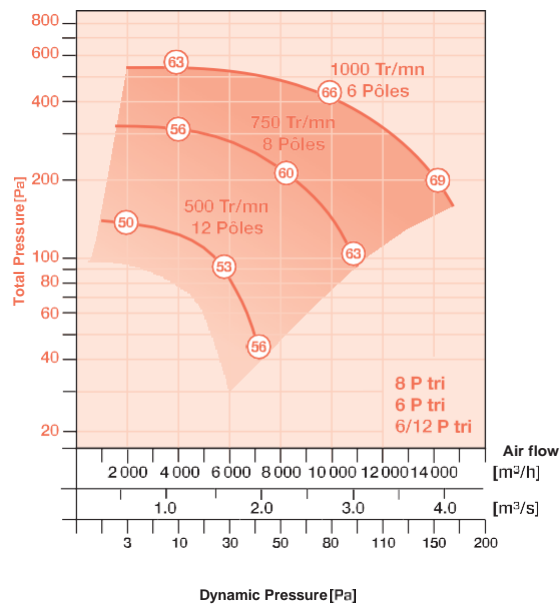
REFLEX® 560



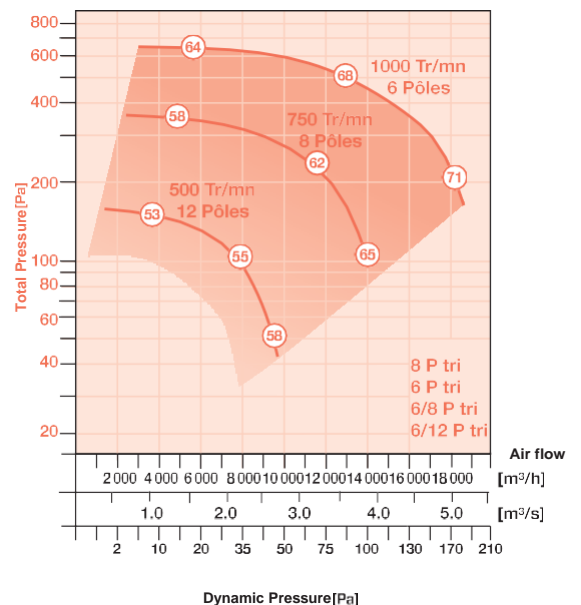
REFLEX® 630



REFLEX® 710



REFLEX® 800



○ : Sound level at 6 m in free field dB(A), REFLEX®C.

REFLEX®V: vertical outlet version, allow for an attenuation of -4 dB(A).

REFLEX®H: directed horizontal outlet version, allow for an attenuation of -2 dB(A).





EXCLUSIVE CONFIGURATIONS F400-120/NF EN 12101-3

REFLEX®



PADLOCKABLE LOCAL SWITCH

Installed as standard over the whole range.



TILTING KIT

Standard on all versions, this kit enables the REFLEX® turret to be easily maintained.



FACTORY-WIRED ASSEMBLY, RELAY UNIT ref. CDF® AND SPEED CONTROLLER ref. VFT

Separate or combined, these factory-fitted configurations are F400-120 / NF EN12101-3 approved by the CSTB. In association with the tilting kit and non-return valve function available as standard on the H and V versions, this combination of features makes the REFLEX® turret the leading "PLUG & PLAY" product in its category.



BAFFLE SILENCER KIT ref. KSB

Provides powerful acoustic attenuation within the system.

KSB model	Dimensions l x L x H (mm)	Weight (kg)	Attenuation dB(A)
280 - 400	620 x 620 x 620	26	7
450 - 560	811 x 811 x 811	48	8
630 - 800	1101 x 1101 x 1101	74	10

ACOUSTIC CHARACTERISTICS

REFLEX®

○ : Sound level at 6 m in free field dB(A), REFLEX® C.

For REFLEX® H, allow for an attenuation of -2 dB(A).

For REFLEX® V, allow for an attenuation of -4 dB(A).

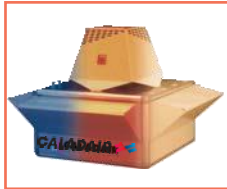
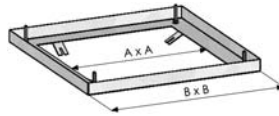
To obtain the acoustic spectrum for the REFLEX® turret, take the sound level shown on the curves and apply the correction coefficients below. Warning: do not forget to deduct these values according to the version of the REFLEX® turret.

Turret model	Motor	63	125	250	500	1000	2000	4000	8000
REFLEX® 280	B4	-30	-20	-11	-5	-5	-8	-12	-21
	A6	-27	-16	-10	-4	-6	-9	-14	-24
REFLEX® 315	B4	-30	-19	-11	-3	-8	-8	-12	-22
	A6	-27	-15	-10	-3	-8	-9	-14	-24
REFLEX® 355	B4	-25	-16	-8	-5	-6	-8	-11	-19
	A6	-22	-12	-7	-5	-7	-9	-13	-22
REFLEX® 400	B4	-27	-18	-10	-5	-6	-7	-11	-18
	A6	-24	-14	-9	-6	-7	-9	-13	-20
REFLEX® 450	D4	-28	-18	-11	-5	-6	-7	-13	-20
	B6	-25	-14	-10	-4	-7	-8	-15	-23
REFLEX® 500	F4	-30	-19	-8	-6	-5	-8	-13	-21
	B6	-21	-11	-7	-6	-6	-9	-14	-24
REFLEX® 560	G4	-23	-13	-11	-6	-7	-7	-9	-14
	D6	-20	-9	-10	-5	-8	-9	-11	-16
REFLEX® 630	D8	-	-	-	-	-	-	-	-
	F6	-19	-13	-10	-5	-6	-8	-13	-19
REFLEX® 710	E8	-	-	-	-	-	-	-	-
	G6	-24	-17	-10	-5	-6	-8	-11	-17
REFLEX® 800	G8	-	-	-	-	-	-	-	-
	I6	-27	-11	-7	-5	-6	-9	-13	-21



Frames for cementing in ref. CAS

Turret model	AxA	BxB	Weight (kg)
280 - 400	425	545	3,1
450 - 560	615	735	6,2
630 - 800	885	1005	8,5

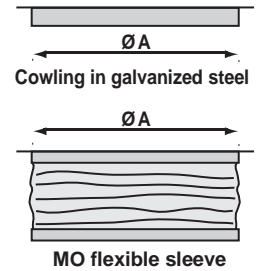


COLORS

To meet environmental requirements the colour of the REFLEX® turret can be adapted to that of the roof.

Fittings ref. VIT

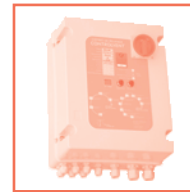
Turret model	A (mm)
280 - 315	250
	315
280 - 400	355
280 - 500	400
450 - 560	450
	500
450 - 630	560
630 - 710	630
630 - 800	710
	800

ELECTRICAL
OPTIONS

REFLEX®

DIFFERENTIAL PRESSURE
SWITCH ref. DEP

Function: to detect a ventilation fault.
 ✦ Factory-fitting to REFLEX® turret
 F400-120 / NF EN 12101-3 approved



RELAY UNIT ref. CDF®

Function: the CDF® unit can be factory wired and fitted to the REFLEX® turret.
 ✦ Factory-fitting
 F400-120 / NF EN 12101-3 approved



2-SPEED SINGLE-PHASE UNIT ref. CATM

Function: controls the REFLEX® single phase turret at 2 speeds either by remote control (CATM D version) or by weekly timer (version CATM H).

- Can be factory-fitted and wired to the turret.



SPEED CONTROLLER ref. VFM/T

Function: regulation of fan speed by varying the power supply frequency.

VFM: 230V single phase supply and 230V three-phase output for comfort application. Not compatible for connecting via the relay unit. The VFT speed controller must be used for this.

VFT: 400 V three phase supply and 400 V three-phase output for comfort/smoke extraction application.

✦ Factory fitting and wiring of the speed controller in the motor compartment of the REFLEX® turret with remote potentiometer F400-120 / NF EN 12101-3 approved.



2-SPEED CONTROL BOX ref. CDA

Function: controls and protects two-speed motors.

DAHLANDER or SEPARATED WINDINGS, coupling with 24V local or remote control.

- The box can be factory-fitted to the unit.



LOBBY® SELF-REGULATING CONSTANT PRESSURE UNIT

Function: adapts the fan rotation speed instantaneously to the requirements of the installation. Energy savings of 30 to 60% and a reduction of sound levels radiated by the system.

✦ Factory wiring and fitting for LOBBY-T version F400-120 / NF EN 12101-3 approved for comfort/smoke application.