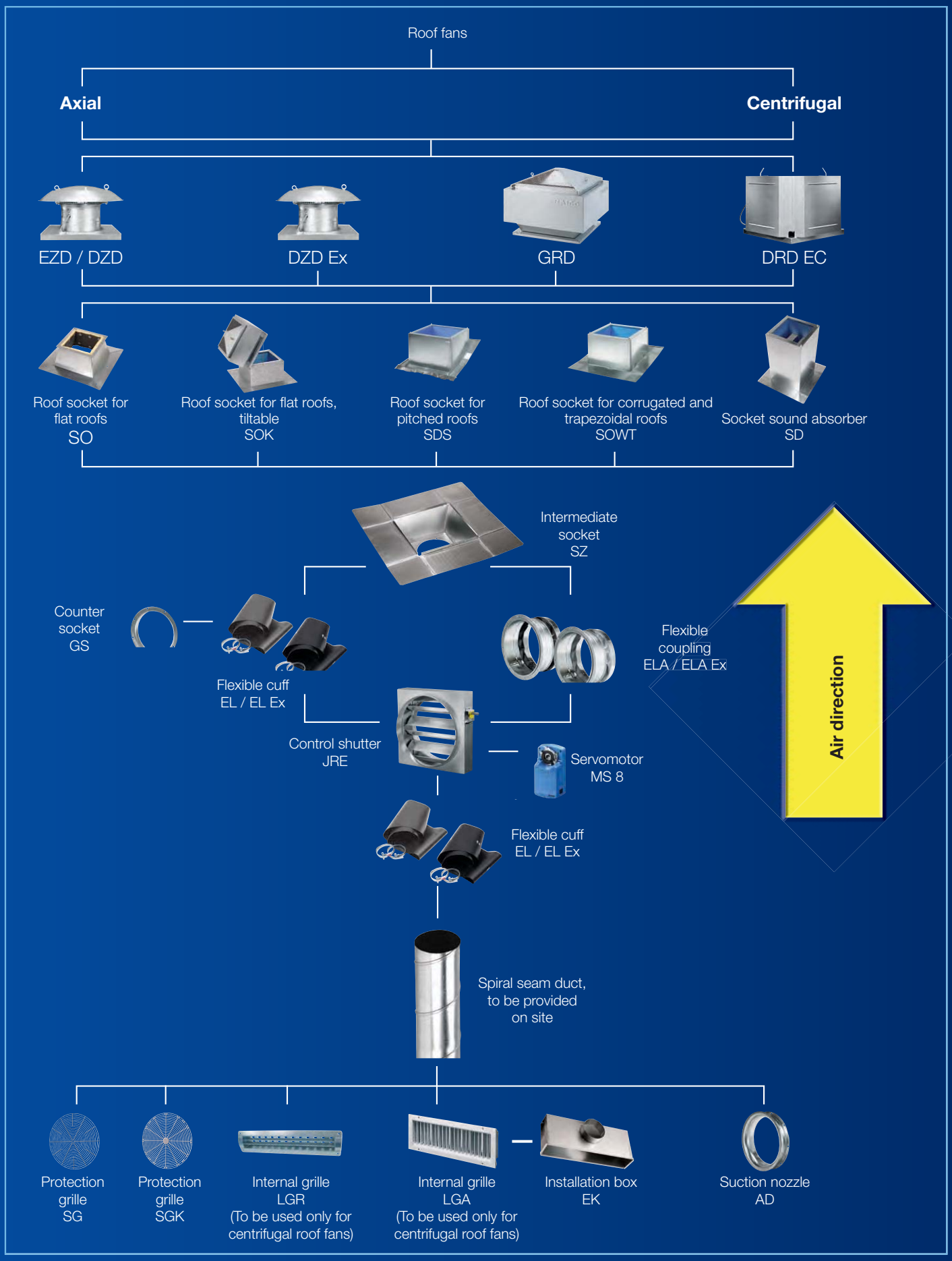
Roof fans

Example illustration of a ventilation installation



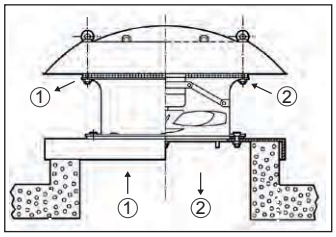
EZD / DZD axial roof fan

Features

- Housing, base plate, intake nozzle and rain protection cover made of galvanised sheet steel.
- Galvanized protective grille on the discharge side, protection against accidental contact in accordance with DIN EN ISO 13857.
- Sturdy eyebolts enable transport by crane.
- 8-blade impeller made of glass-fibre filled polyamide. Dynamically balanced at two levels, in accordance with performance level 6.3, DIN ISO 1940, Part 1.
- Can be switched to ventilation or air extraction (exception EZD ... E).

Air flow direction

- The following illustration shows the air flow direction:



① Standard air flow direction: With air blown across the motor.
② Reversing mode: With air drawn across the motor.

- Reverse operation (exception EZD ... E): The volumetric flow is reduced by approx. 35 % with abnormal air flow direction.

Motor

- Asynchronous motor.
- Reversible. Exception: Fans with shaded-pole motors (“.../E”).
- Thermal overload protection as a standard feature.

AC motor

- EZD model series.
- Rated voltage 230 V, 50 Hz.
- “../B” and “../D” fans: Capacitor motors with operating capacitor in terminal box.
- “../E” fans: Shaded-pole motors, non reversible.
- Degree of protection for EZD... D and ... E IP 54.
- Degree of protection for EZD... B IP 55.

Three-phase AC motor

- DZD model series.
- Rated voltage 400 V, 50 Hz.
- Degree of protection for DZD... D IP 54.
- Degree of protection for DZD... B and ... E IP 55.

Electrical connection

- Connecting cable, approx. 1.7 m long.

Safety instructions

- The fan may be operated only if the protection against accidental contact with the impeller is guaranteed to be in accordance with DIN EN ISO 13857.

Special versions

- The following special versions are available on request, at an extra cost:
  - Special voltages and frequencies.
  - Fans with enhanced anti-corrosion protection.
  - Impellers made of aluminium.
- Information on operation at temperatures occasionally below -20°C available upon request.
- If operating with frequency converters, the factory must be consulted.
- Feasibility must be checked in each case.

Technical data for units < 125 W

Article	Art. No.	U_{nom} V	f_{nom} Hz	Air flow volume m^3/h	Rotating speed 1/min	P_{nom} W	I_{max} A	T_{max} at I_{max} °C	Sound power level L_{WA7} dB(A)	Weight kg
DN 250										
EZD 25/4 D	**0087.0487**	230	50	750	1,425	35	0.16	60	64	11.7
EZD 25/4 E	**0087.0486**	230	50	720	1,280	50	0.28	60	63	11.5
DZD 25/4 D	**0087.0490**	400	50	800	1,425	50	0.14	60	67	11.5
DN 300										
EZD 30/6 B	**0087.0203**	230	50	880	940	65	0.33	60	60	15.6
EZD 30/4 B	**0087.0204**	230	50	1,400	1,450	90	0.45	60	71	16.9
DZD 30/4 B	**0087.0215**	400	50	1,400	1,450	100	0.35	60	70	16.9

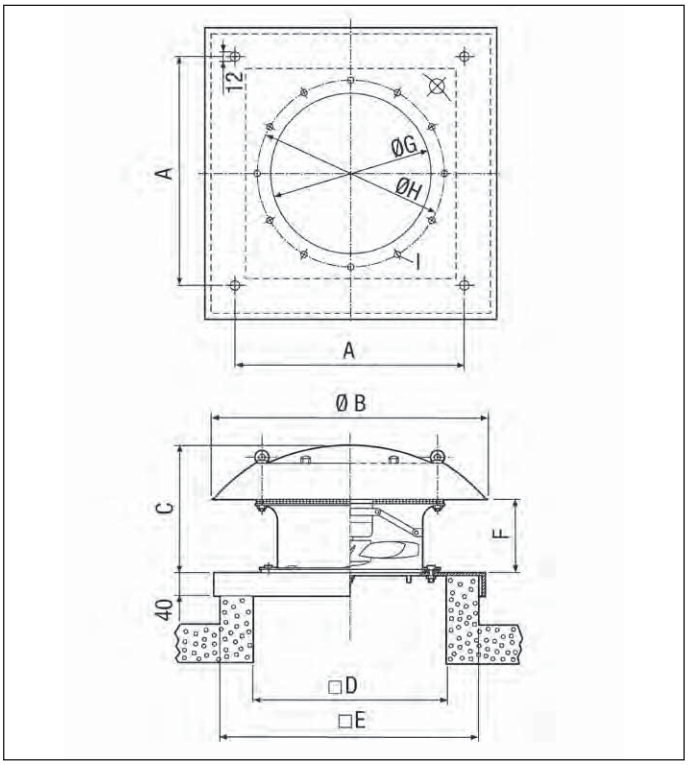
Technical data for units > 125 W according to ErP in Best Efficiency Point (BEP)

Article	Art. No.	U_{nom}	f_{nom}	Air flow volume	Sound power level L_{WA7}	Air volume$_{nom}$	Pressure $p_{fs, nom}$	Rotating speed n_{nom}	P_{nom}	I_{nom}	I_{max}	T_{max} at I_{max}	Weight	Efficiency level N	Total efficiency η
		V	Hz	m³/h	dB(A)	m³/h	Pa	1/min	W	A	A	°C	kg		%
DN 250															
EZD 25/2 B	**0087.0202**	230	50	1,900	86	1,290 [1]	112 [1]	2,930 [1]	180 [1]	1 [1]	1.3	60	16.9	40.2	29.2
DZD 25/2 B	**0087.0213**	400	50	1,840	91	1,100 [1]	125 [1]	2,830 [1]	170 [1]	0.35 [1]	0.4	60	14.2	40.2	29.2
DN 300															
EZD 30/2 B	**0087.0205**	230	50	3,090	89	2,060 [1]	135 [1]	2,810 [1]	375 [1]	1.7 [1]	2.3	60	20.4	43.1	34.2
DZD 30/2 B	**0087.0216**	400	50	3,100	89	2,040 [1]	135 [1]	2,830 [1]	380 [1]	0.85 [1]	1	60	20.1	43.2	34.3
DN 355															
EZD 35/4 B	**0087.0207**	230	50	2,280	78	1,330 [1]	65 [1]	1,450 [1]	125 [1]	0.5 [1]	0.65	60	24.4	43.6	31.4
DZD 35/4 B	**0087.0218**	400	50	2,325	78	1,210 [1]	80 [1]	1,470 [1]	145 [1]	0.57 [1]	0.6	60	23.8	40.6	28.8
DN 400															
EZD 40/4 B	**0087.0209**	230	50	3,330	80	1,970 [1]	84 [1]	1,400 [1]	235 [1]	0.95 [1]	1.4	60	28.7	43.9	33.5
DZD 40/4 B	**0087.0222**	400	50	3,260	79	1,770 [1]	90 [1]	1,365 [1]	244 [1]	0.6 [1]	0.65	60	26.6	40.1	29.8
DN 500															
EZD 50/6 B	**0087.0211**	230	50	4,040	79	2,560 [1]	55 [1]	945 [1]	245 [1]	1.1 [1]	1.3	60	39.7	40.3	30.1
DZD 50/6 B	**0087.0225**	400	50	4,160	80	2,450 [1]	62 [1]	945 [1]	245 [1]	0.65 [1]	0.7	60	38	40.4	30.1
DZD 50/4 B	**0087.0226**	400	50	6,170	91	3,600 [1]	140 [1]	1,400 [1]	665 [1]	1.2 [1]	1.4	60	38.5	44.2	36.7
DN 600															
DZD 60/6 B	**0087.0228**	400	50	7,030	84	4,320 [1]	88 [1]	935 [1]	530 [1]	1.1 [1]	1.3	60	45.5	40.3	32.1
DZD 60/4 B	**0087.0229**	400	50	9,920	94	6,050 [1]	175 [1]	1,330 [1]	1,445 [1]	2.4 [1]	3.1	60	62.5	40.2	34.8

[1] In opt. efficiency

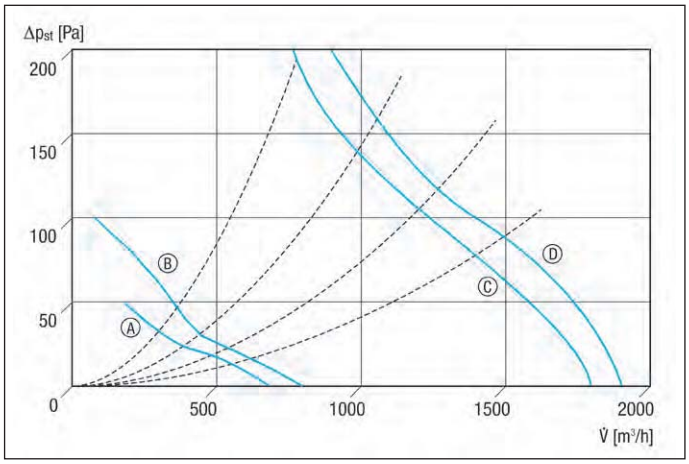
BEP measured in measurement category C, static efficiency category. For further ErP data, see www.maico-fans.com.
Calculation of energy efficiency without protective grille and roof cowl.

Dimensions [mm]



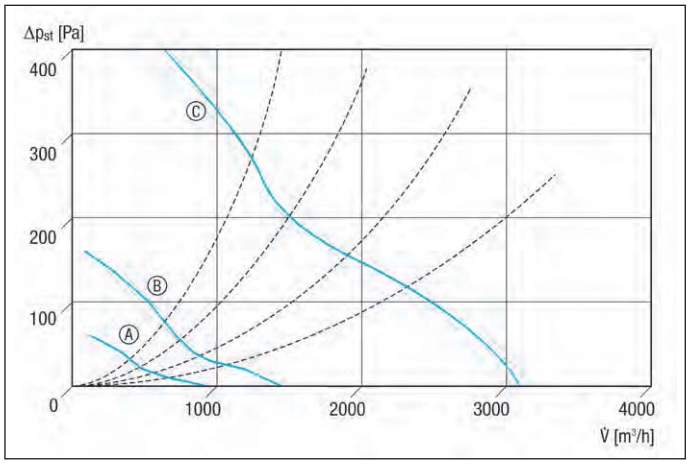
Nominal size	A	B	C	D	E	F	G	H	I
DN 250	500	570	285	355	560	170	263	286	7
DN 300	570	660	335	405	630	190	313	356	9
DN 355	610	720	340	455	670	190	363	395	9
DN 400	650	830	375	505	710	190	413	438	9
DN 500	800	940	380	605	860	190	513	541	9
DN 600	840	1,100	420	720	900	190	613	674	11

Characteristic curves for DN 250



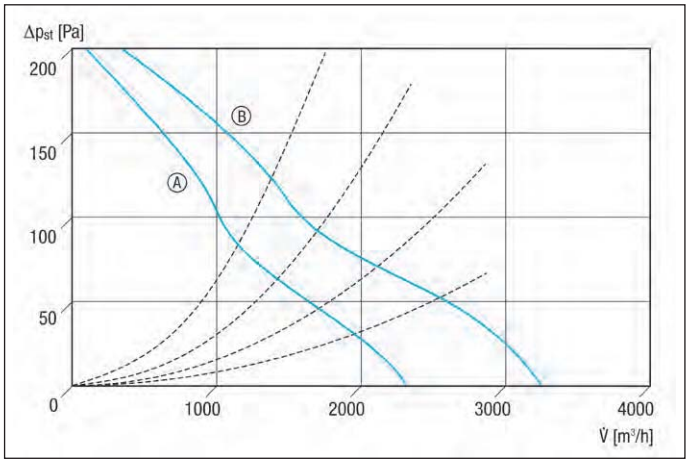
Ⓐ EZD 25/4 E
Ⓑ EZD, DZD 25/4 D
Ⓒ DZD 25/2 B
Ⓓ EZD 25/2 B

Characteristic curves for DN 300



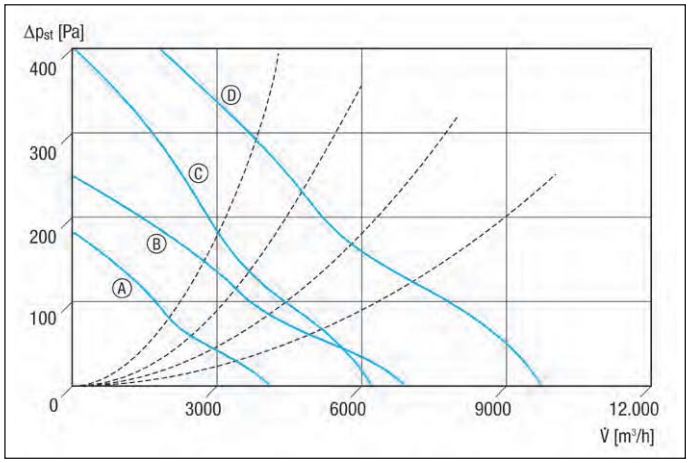
Ⓐ EZD 30/6 B
Ⓑ EZD, DZD 30/4 B
Ⓒ EZD, DZD 30/2 B

Characteristic curves for DN 355 and DN 400



Ⓐ EZD, DZD 35/4 B
Ⓑ EZD, DZD 40/4 B

Characteristic curves for DN 500 and DN 600



Ⓐ EZD 50/6 B
Ⓑ DZD 60/6 B
Ⓒ DZD 50/4 B
Ⓓ DZD 60/4 B

Accessories selection table

	EZD 25/4 D	EZD 25/4 E	EZD 25/2 B	DZD 25/4 D	DZD 25/2 B	EZD 30/6 B	EZD 30/4 B	EZD 30/2 B	DZD 30/4 B	DZD 30/2 B	see
General accessories											
Control shutter	JRE 25	JRE 25	JRE 25	JRE 25	JRE 25	JRE 30	JRE 30	JRE 30	JRE 30	JRE 30	**P. 293**
Servomotor	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	**P. 293**
Protective grille, metal	SG 25	SG 25	SG 25	SG 25	SG 25	SG 30	SG 30	SG 30	SG 30	SG 30	**P. 289**
Protective grille, synthetic material	SGK 25	SGK 25	SGK 25	SGK 25	SGK 25	SGK 30	SGK 30	SGK 30	SGK 30	SGK 30	**P. 290**
Flexible coupling	ELA 25	ELA 25	ELA 25	ELA 25	ELA 25	ELA 30	ELA 30	ELA 30	ELA 30	ELA 30	**P. 292**
Suction nozzle	AD 25	AD 25	AD 25	AD 25	AD 25	AD 30	AD 30	AD 30	AD 30	AD 30	**P. 289**
Socket sound absorber	SD 25	SD 25	SD 25	SD 25	SD 25	SD 31	SD 31	SD 31	SD 31	SD 31	**P. 288**
Reversing switch	W 1 WU 1	–	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	**P. 334**
Speed controller	ST 1 STU 1	ST 1 STU 1	ST 2,5 STU 2,5	–	–	ST 1 STU 1	ST 1 STU 1	ST 2,5 STU 2,5	–	–	**P. 338**
Speed controller, distribution board	–	–	STS 2,5	–	–	–	–	STS 2,5	–	–	**P. 339**
Speed controller, reversing switch	STW 1	–	STW 2,5	–	–	STW 1	STW 1	STW 2,5	–	–	**P. 339**
5-step transformer	TRE 0,4-2	TRE 0,4-2	TRE 1,6-2	TR 0,4-2	TR 0,8-2	TRE 0,4-2	TRE 0,6-2	TRE 3,3-2	TR 0,4-2	TR 2,5-2	**P. 340**
5-step transformer, control cabinet	TRE 1,6 S-2	TRE 1,6 S-2	TRE 1,6 S-2	TR 0,8 S-2	TR 0,8 S-2	TRE 1,6 S-2	TRE 1,6 S-2	TRE 3,3 S-2	TR 0,8 S-2	TR 2,5 S-2	**P. 341**
5-step switch for TRE...S -2/ TR...S-2 5-step transformer	ESS 20	ESS 20	ESS 20	DSS 20	DSS 20	ESS 20	ESS 20	ESS 20	DSS 20	DSS 20	**P. 341**
Temperature control system	EAT 6 G/1 EAT 6 TG	EAT 6 G/1 EAT 6 TG	EAT 6 G/1 EAT 6 TG	–	–	EAT 6 G/1 EAT 6 TG	EAT 6 G/1 EAT 6 TG	EAT 6 G/1 EAT 6 TG	–	–	**P. 345**
Roof socket for flat roofs	SO 25	SO 25	SO 25	SO 25	SO 25	SO 30	SO 30	SO 30	SO 30	SO 30	**P. 286**
Roof socket for flat roofs, tiltable	SOK 25	SOK 25	SOK 25	SOK 25	SOK 25	SOK 31	SOK 31	SOK 31	SOK 31	SOK 31	**P. 286**
Roof socket for pitched roofs	SDS 25	SDS 25	SDS 25	SDS 25	SDS 25	SDS 31	SDS 31	SDS 31	SDS 31	SDS 31	**P. 287**
Roof socket for corrugated and trapezoidal roofs	SOWT 25	SOWT 25	SOWT 25	SOWT 25	SOWT 25	SOWT 31	SOWT 31	SOWT 31	SOWT 31	SOWT 31	**P. 287**
Intermediate socket	SZ 25	SZ 25	SZ 25	SZ 25	SZ 25	SZ 31	SZ 31	SZ 31	SZ 31	SZ 31	**P. 288**

	EZD 35/4 B	DZD 35/4 B	EZD 40/4 B	DZD 40/4 B	EZD 50/6 B	DZD 50/6 B	DZD 50/4 B	DZD 60/6 B	DZD 60/4 B	see
General accessories										
Control shutter	JRE 35	JRE 35	JRE 40	JRE 40	JRE 50	JRE 50	JRE 50	JRE 60	JRE 60	**P. 293**
Servomotor	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	MS 8 MS 8 P	**P. 293**
Protective grille, metal	SG 35	SG 35	SG 40	SG 40	SG 50	SG 50	SG 50	SG 60	SG 60	**P. 289**
Protective grille, synthetic material	SGK 35	SGK 35	SGK 40	SGK 40	–	–	–	–	–	**P. 290**
Flexible coupling	ELA 35	ELA 35	ELA 40	ELA 40	ELA 50	ELA 50	ELA 50	ELA 60	ELA 60	**P. 292**
Suction nozzle	AD 35	AD 35	AD 40	AD 40	AD 50	AD 50	AD 50	AD 60	AD 60	**P. 289**
Socket sound absorber	SD 35	SD 35	SD 40	SD 40	SD 50	SD 50	SD 50	–	–	**P. 288**
Reversing switch	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	W 1 WU 1	**P. 334**
Speed controller	ST 1 STU 1	–	ST 2,5 STU 2,5	–	ST 2,5 STU 2,5	–	–	–	–	**P. 338**
Speed controller, distribution board	STS 2,5	–	STS 2,5	–	STS 2,5	–	–	–	–	**P. 339**
Speed controller, reversing switch	STW 1	–	STW 2,5	–	STW 2,5	–	–	–	–	**P. 339**
5-step transformer	TRE 1,6-2	TR 0,8-2	TRE 1,6-2	TR 0,8-2	TRE 1,6-2	TR 0,8-2	TR 2,5-2	TR 2,5-2	TR 6,6-2	**P. 340**
5-step transformer, control cabinet	TRE 1,6 S-2	TR 0,8 S-2	TRE 1,6 S-2	TR 0,8 S-2	TRE 1,6 S-2	TR 0,8 S-2	TR 2,5 S-2	TR 2,5 S-2	TR 6,6 S-2	**P. 341**
5-step switch for TRE...S -2/ TR...S-2 5-step transformer	ESS 20	DSS 20	ESS 20	DSS 20	ESS 20	DSS 20	DSS 20	DSS 20	DSS 20	**P. 341**
Temperature control system	EAT 6 G/1 EAT 6 TG	–	EAT 6 G/1 EAT 6 TG	–	EAT 6 G/1 EAT 6 TG	–	–	–	–	**P. 345**
Roof socket for flat roofs	SO 35	SO 35	SO 40	SO 40	SO 50	SO 50	SO 50	SO 60	SO 60	**P. 286**
Roof socket for flat roofs, tiltable	SOK 35	SOK 35	–	–	–	–	–	–	–	**P. 286**
Roof socket for pitched roofs	SDS 35	SDS 35	SDS 40	SDS 40	SDS 50	SDS 50	SDS 50	–	–	**P. 287**
Roof socket for corrugated and trapezoidal roofs	SOWT 35	SOWT 35	SOWT 40	SOWT 40	SOWT 50	SOWT 50	SOWT 50	–	–	**P. 287**
Intermediate socket	SZ 35	SZ 35	SZ 40	SZ 40	–	–	–	–	–	**P. 288**