

Italian Company



Systems and components for industrial enclosures





FF Series fan filters

FF series with an easy-to-mount tool-less fixing system with clips, optimized for 1 to 2.5mm thick enclosures.

Model	Dimensions	Cut-out	Voltage	Frequency	Rated Power	Max Air Flow	Rated Temp. Range	Approvals
	mm	mm	(V)	(Hz)	(W)	(m³/h)**	(°C)	
FF08A115UN	106,5x106,5	91,5x91,5	115 Va.c.	50/60	9.0/7.0	12/15	-10 ~ +55	CE cURus cCSAus
FF08A115UNR	106,5x106,5	91,5x91,5	115 Va.c.	50/60	9.0/7.5	16/21	-10 ~ +55	CE cURus cCSAus
FF08A230UN	106,5x106,5	91,5x91,5	230 Va.c.	50/60	10/8.0	12/15	-10 ~ +55	CE cURus cCSAus
FF08A230UNR	106,5x106,5	91,5x91,5	230 Va.c.	50/60	10/8.0	16/21	-10 ~ +55	CE cURus cCSAus
FF08D24UN	106,5x106,5	91,5x91,5	24 Vd.c.	-	2.0	15	-10 ~ +55	CE cURus cCSAus
FF08D24UNR	106,5x106,5	91,5x91,5	24 Vd.c.	-	2.2	21	-10 ~ +55	CE cURus cCSAus
FF08GA115UF	106,5x106,5	92,5x92,5	115 Va.c.	50/60	12/10	22/26	-10 ~ +55	CE cURus cCSAus
FF08GA115UNR	106,5x106,5	92,5x92,5	230 Va.c.	50/60	12/9.0	16/20	-10 ~ +55	CE cURus cCSAus
FF08GA230UF	106,5x106,5	92,5x92,5	230 Va.c.	50/60	12/11	22/26	-10 ~ +55	CE cURus cCSAus
FF08GA230UNR	106,5x106,5	92,5x92,5	230 Va.c.	50/60	12/10	16/20	-10 ~ +55	CE cURus cCSAus
FF08GD24UN	106,5x106,5	92,5x92,5	24 Vd.c.	-	15	50	-10 ~ +55	CE cURus cCSAus
FF08GD24UNR	106,5x106,5	92,5x92,5	24 Vd.c.	-	17	60	-10 ~ +55	CE cURus cCSAus
FF08U	106,5x106,5	91,5x91,5					-10 ~ +60	CE cURus cCSAus
FF12A115UF	150x150	125x125	115 Va.c.	50/60	16/15	45/50	-10 ~ +55	CE cURus cCSAus
FF12A115UFR	150x150	125x125	115 Va.c.	50/60	16/15	47/52	-10 ~ +55	CE cURus cCSAus
FF12A115UN	150x150	125x125	115 Va.c.	50/60	19/17	67/79	-10 ~ +55	CE cURus cCSAus
FF12A115UNR	150x150	125x125	115 Va.c.	50/60	19/17	60/70	-10 ~ +55	CE cURus cCSAus
FF12A230UF	150x150	125x125	230 Va.c.	50/60	18/17	45/50	-10 ~ +55	CE cURus cCSAus
FF12A230UFR	150x150	125x125	230 Va.c.	50/60	18/17	47/52	-10 ~ +55	CE cURus cCSAus
FF12A230UN	150x150	125x125	230 Va.c.	50/60	18/16	67/79	-10 ~ +55	CE cURus cCSAus
FF12A230UNR	150x150	125x125	230 Va.c.	50/60	18/16	60/70	-10 ~ +55	CE cURus cCSAus
FF12A24UF	150x150	125x125	24 Va.c.	50/60	15/15	39/44	-10 ~ +60	CE
FF12A24UFR	150x150	125x125	24 Va.c.	50/60	15/15	50/52	-10 ~ +60	CE
FF12D24UN	150x150	125x125	24 Vd.c.	-	7.4	47	-10 ~ +55	CE UR cCSAus
FF12D24UNR	150x150	125x125	24 Vd.c.	-	7.4	64	-10 ~ +55	CE UR cCSAus
FF12D48UN	150x150	125x125	48 Vd.c.	-	8.6	47	-10 ~ +55	CE UR cCSAus
FF12D48UNR	150x150	125x125	48 Vd.c.	-	8.6	64	-10 ~ +55	CE UR cCSAus
FF12U	150x150	125x125					-10 ~ +60	CE cURus cCSAus
FF13PA115UF	203,9x203,9	177x177	115 Va.c.	50/60	19/18	100/110	-10 ~ +55	CE cURus cCSAus
FF13PA115UFR	203,9x203,9	177x177	115 Va.c.	50/60	18/18	100/110	-10 ~ +55	CE cURus cCSAus
FF13PA115UN	203,9x203,9	177x177	115 Va.c.	50/60	16/15	110/130	-10 ~ +55	CE cURus cCSAus
FF13PA115UNR	203,9x203,9	177x177	115 Va.c.	50/60	20/18	110/135	-10 ~ +55	CE cURus cCSAus
FF13PA230UF	203,9x203,9	177x177	230 Va.c.	50/60	18/18	100/110	-10 ~ +55	CE cURus cCSAus
FF13PA230UFR	203,9x203,9	177x177	230 Va.c.	50/60	18/18	100/110	-10 ~ +55	CE cURus cCSAus
FF13PA230UN	203,9x203,9	177x177	230 Va.c.	50/60	19/17	110/130	-10 ~ +55	CE cURus cCSAus
FF13PA230UNR	203,9x203,9	177x177	230 Va.c.	50/60	19/18	110/135	-10 ~ +55	CE cURus cCSAus
FF13PD24UN	203,9x203,9	177x177	24 Vd.c.	-	8.2	100	-10 ~ +55	CE UR cCSAus
FF13PD24UNR	203,9x203,9	177x177	24 Vd.c.	-	8.5	120	-10 ~ +55	CE UR cCSAus
FF13U	203,9x203,9	177x177					-10 ~ +60	CE cURus cCSAus
FF15A115UF	250x250	223x223	115 Va.c.	50/60	31/31	230/270	-10 ~ +55	CE cURus cCSAus
FF15A115UFR	250x250	223x223	115 Va.c.	50/60	31/26	245/290	-10 ~ +55	CE cURus cCSAus
FF15A115UN	250x250	223x223	115 Va.c.	50/60	27/32	225/255	-10 ~ +50	CE
FF15A115UNR	250x250	223x223	115 Va.c.	50/60	27/32	240/275	-10 ~ +50	CE
FF15A115UN2	250x250	223x223	115 Va.c.	50/60	39/41	230/272	-10 ~ +55	CE cURus cCSAus
FF15A115UNR2	250x250	223x223	115 Va.c.	50/60	39/41	238/283	-10 ~ +55	CE cURus cCSAus
FF15A230UF	250x250	223x223	230 Va.c.	50/60	32/36	230/270	-10 ~ +55	CE cURus cCSAus
FF15A230UFR	250x250	223x223	230 Va.c.	50/60	32/36	245/290	-10 ~ +55	CE cURus cCSAus

(**) data with uncertainty of ±15% ■ IP44

Model	Dimensions	Cut-out	Voltage	Frequency	Rated Power	Max Air Flow	Rated Temp. Range	Approvals
	mm	mm	(V)	(Hz)	(W)	(m ³ /h)**	(°C)	
FF15A230UN	250x250	223x223	230 Va.c.	50/60	32/38	225/255	-10 ~ +50	CE
FF15A230UNR	250x250	223x223	230 Va.c.	50/60	32/38	240/275	-10 ~ +50	CE
FF15D24UF	250x250	223x223	24 Vd.c.	-	31	280	-10 ~ +55	CE cURus cCSAus
FF15D24UFR	250x250	223x223	24 Vd.c.	-	31	300	-10 ~ +55	CE cURus cCSAus
FF15D24UN	250x250	223x223	24 Vd.c.	-	17	225	-10 ~ +55	CE UR cCSAus
FF15D24UNR	250x250	223x223	24 Vd.c.	-	17	255	-10 ~ +55	CE UR cCSAus
FF15D48UF	250x250	223x223	48 Vd.c.	-	62	280	-10 ~ +70	CE
FF15D48UFR	250x250	223x223	48 Vd.c.	-	62	300	-10 ~ +70	CE
FF15D48UN	250x250	223x223	48 Vd.c.	-	16	225	-10 ~ +55	CE UR cCSAus
FF15D48UNR	250x250	223x223	48 Vd.c.	-	16	255	-10 ~ +55	CE UR cCSAus
FF15MA115UF	250x250	223x223	115 Va.c.	50/60	16/15	130/145	-10 ~ +70	CE
FF15MA115UFR	250x250	223x223	115 Va.c.	50/60	16/15	140/155	-10 ~ +70	CE
FF15MA230UF	250x250	223x223	230 Va.c.	50/60	21/20	130/145	-10 ~ +70	CE
FF15MA230UFR	250x250	223x223	230 Va.c.	50/60	21/20	140/155	-10 ~ +70	CE
FF15PA115UF	250x250	223x223	115 Va.c.	50/60	17/16	105/120	-10 ~ +55	CE cURus cCSAus
FF15PA115UFR	250x250	223x223	115 Va.c.	50/60	17/16	110/120	-10 ~ +55	CE cURus cCSAus
FF15PA115UN	250x250	223x223	115 Va.c.	50/60	20/19	125/145	-10 ~ +55	CE cURus cCSAus
FF15PA115UNR	250x250	223x223	115 Va.c.	50/60	20/19	130/150	-10 ~ +55	CE cURus cCSAus
FF15PA230UF	250x250	223x223	230 Va.c.	50/60	18/17	105/120	-10 ~ +55	CE cURus cCSAus
FF15PA230UFR	250x250	223x223	230 Va.c.	50/60	18/17	110/120	-10 ~ +55	CE cURus cCSAus
FF15PA230UN	250x250	223x223	230 Va.c.	50/60	19/17	125/145	-10 ~ +55	CE cURus cCSAus
FF15PA230UNR	250x250	223x223	230 Va.c.	50/60	19/18	130/150	-10 ~ +55	CE cURus cCSAus
FF15PD24UN	250x250	223x223	24 Vd.c.	-	7.6	140	-10 ~ +55	CE UR cCSAus
FF15PD24UNR	250x250	223x223	24 Vd.c.	-	7.6	150	-10 ~ +55	CE UR cCSAus
FF15PD48UN	250x250	223x223	48 Vd.c.	-	8.6	140	-10 ~ +55	CE UR cCSAus
FF15PD48UNR	250x250	223x223	48 Vd.c.	-	8.6	150	-10 ~ +55	CE UR cCSAus
FF15U	250x250	223x223					-10 ~ +60	CE cURus cCSAus
FF20A115UE	325x325	291x291	115 Va.c.	50/60	60/74	520/580	-10 ~ +70	CE
FF20A115UE1	325x325	291x291	115 Va.c.	50/60	74/83	520/580	-10 ~ +55	CE cURus cCSAus
FF20A115UER	325x325	291x291	115 Va.c.	50/60	64/73	550/610	-10 ~ +70	CE
FF20A115UER1	325x325	291x291	115 Va.c.	50/60	74/83	550/610	-10 ~ +55	CE cURus cCSAus
FF20A230UE	325x325	291x291	230 Va.c.	50/60	73/87	520/580	-10 ~ +70	CE
FF20A230UE1	325x325	291x291	230 Va.c.	50/60	70/85	520/580	-10 ~ +55	CE cURus cCSAus
FF20A230UER	325x325	291x291	230 Va.c.	50/60	74/86	550/610	-10 ~ +70	CE
FF20A230UER1	325x325	291x291	230 Va.c.	50/60	70/85	550/610	-10 ~ +55	CE cURus cCSAus
FF20A400TUE	325x325	291x291	400 3 ~	50/60	169/n.a.	540/n.a.	-10 ~ +70	CE
FF20GEA400TUE	325x325	291x291	400 3 ~	50/60	160/n.a.	515/n.a.	-10 ~ +55	CE
FF20GA115UE	325x232	291x291	115 Va.c.	50/60	165/215	730/820	-10 ~ +60	CE
FF20GA115UE1	325x232	291x291	115 Va.c.	50/60	165/215	670/760	-10 ~ +55	CE cURus cCSAus
FF20GA115UER	325x232	291x291	115 Va.c.	50/60	175/225	740/840	-10 ~ +60	CE
FF20GA115UER1	325x232	291x291	115 Va.c.	50/60	175/225	740/840	-10 ~ +55	CE cURus cCSAus
FF20GA230UE	325x232	291x291	230 Va.c.	50/60	150/190	730/820	-10 ~ +60	CE
FF20GA230UE1	325x232	291x291	230 Va.c.	50/60	155/195	670/760	-10 ~ +55	CE cURus cCSAus
FF20GA230UER	325x232	291x291	230 Va.c.	50/60	165/205	720/820	-10 ~ +60	CE
FF20GA230UER1	325x232	291x291	230 Va.c.	50/60	165/205	720/820	-10 ~ +55	CE cURus cCSAus
FF20GA115UEA	325x232	291x291	115 Va.c.	50/60	170/220	820/930	-10 ~ +60	CE
FF20GA230UEA	325x232	291x291	230 Va.c.	50/60	155/190	820/930	-10 ~ +60	CE
FF20GA115UEA1	325x232	291x291	115 Va.c.	50/60	124/146	825/945	-10 ~ +55	CE cURus cCSAus
FF20GA230UEA1	325x232	291x291	230 Va.c.	50/60	120/158	825/945	-10 ~ +55	CE cURus cCSAus
FF20U	325x325	291x291					-10 ~ +60	CE cURus cCSAus

* cURus approvals only at 60 Hz (***) data with uncertainty of ±15%



FPF Series fan filters

FPF series in a wide choice of filter sizes with and without fan. Also available optionally in Type 3R, IP55 and EMC-shielded versions.

Model	Dimensions	Cut-out	Voltage	Frequency	Rated Power	Max Air Flow	Rated Temp. Range	Approvals
	mm	mm	(V)	(Hz)	(W)	(m³/h)**	(°C)	
FPF08K*G-101	105x105	91,5x91,5	-	-	-	-	-10 ~ +60	CE cURus
FPF08K*115B(R)-110	105x105	91,5x91,5	115 Va.c.	50/60	9/7	23/30	-10 ~ +50	CE cURus
FPF08K*230B(R)-110	105x105	91,5x91,5	230 Va.c.	50/60	10/8	23/30	-10 ~ +50	CE cURus
FPF08K*D24B(R)-110	105x105	91,5x91,5	24 Vd.c.	-	3.6	28	-10 ~ +50	CE cURus
FPF12K*G-100	150x150	124x124	-	-	-	-	-10 ~ +60	CE cURus
FPF12K*24BE(R)-110	150x150	124x124	24 Va.c.	50/60	15/16	57/61	-10 ~ +50	CE ■
FPF12K*115BE(R)-110	150x150	124x124	115 Va.c.	50/60	20/18	57/61	-10 ~ +50	CE cURus
FPF12K*230BE(R)-110	150x150	124x124	230 Va.c.	50/60	20/19	57/61	-10 ~ +50	CE cURus
FPF12K*D24B(R)-110	150x150	124x124	24 Vd.c.	-	9.6	60	-10 ~ +50	CE cURus
FPF12K*D48B(R)-110	150x150	124x124	48 Vd.c.	-	7.7	60	-10 ~ +55	CE ■
FPF13K*G-100	204x204	177x177	-	-	-	-	-10 ~ +60	CE cURus
FPF13KP*115BE(R)-110	204x204	177x177	115 Va.c.	50/60	20/18	110/120	-10 ~ +50	CE cURus
FPF13KP*230BE(R)-110	204x204	177x177	230 Va.c.	50/60	20/19	110/120	-10 ~ +50	CE cURus
FPF13KP*D24B(R)-110	204x204	177x177	24 Vd.c.	-	9.6	120	-10 ~ +50	CE cURus
FPF13K*115BE(R)-110	204x204	177x177	115 Va.c.	50/60	17/15	120/135	-10 ~ +50	CE cURus
FPF13K*230BE(R)-110	204x204	177x177	230 Va.c.	50/60	17/15	120/135	-10 ~ +50	CE cURus
FPF15K*G-100	250x250	223x223	-	-	-	-	-10 ~ +60	CE cURus
FPF15KP*115BE(R)-110	250x250	223x223	115 Va.c.	50/60	20/18	115/125	-10 ~ +50	CE cURus
FPF15KP*230BE(R)-110	250x250	223x223	230 Va.c.	50/60	20/19	115/125	-10 ~ +50	CE cURus
FPF15KP*D12B(R)-110	250x250	223x223	12 Vd.c.	-	6.6	120	-10 ~ +50	CE ■
FPF15KP*D24B(R)-110	250x250	223x223	24 Vd.c.	-	9.6	145	-10 ~ +50	CE cURus
FPF15KP*D48B(R)-110	250x250	223x223	48 Vd.c.	-	7.7	145	-10 ~ +55	CE ■
FPF15KM*115BE(R)-110	250x250	223x223	115 Va.c.	50/60	17/15	130/150	-10 ~ +50	CE cURus
FPF15KM*230BE(R)-110	250x250	223x223	230 Va.c.	50/60	17/15	130/150	-10 ~ +50	CE cURus
FPF15K*115BE(R)-110	250x250	223x223	115 Va.c.	50/60	30/30	240/270	-10 ~ +50	CE cURus
FPF15K*230BE(R)-110	250x250	223x223	230 Va.c.	50/60	29/29	240/270	-10 ~ +50	CE cURus
FPF15K*D24B(R)-110	250x250	223x223	24 Vd.c.	-	22.8	250	-10 ~ +50	CE cURus
FPF15K*D48B(R)-110	250x250	223x223	48 Vd.c.	-	17.8	250	-10 ~ +55	CE ■
FPF15KG*115BE(R)-120	250x250	223x223	115 Va.c.	50/60	50/64	360/400	-10 ~ +55	CE ►
FPF15KG*230BE(R)-120	250x250	223x223	230 Va.c.	50/60	67/87	360/400	-10 ~ +50	CE ►
FPF15KG*400TBE(R)-120	250x250	223x223	400 3~	50/60	71/93	360/400	-10 ~ +55	CE ►
FPF15KG*D24BE(R)-120	250x250	223x223	24 Vd.c.	-	59	470	-10 ~ +55	CE ►
FPF15KG*D48BE(R)-120	250x250	223x223	48 Vd.c.	-	59	470	-10 ~ +55	CE ►
FPF20K*G-100	325x325	291x291	-	-	-	-	-10 ~ +60	CE cURus
FPF20K*115BE(R)-120	325x325	291x291	115 Va.c.	50/60	50/64	520/580	-10 ~ +55	CE ►
FPF20K*230BE(R)-120	325x325	291x291	230 Va.c.	50/60	67/87	520/580	-10 ~ +50	CE ►
FPF20K*400TBE(R)-120	325x325	291x291	400 3~	50/60	71/93	520/580	-10 ~ +55	CE ■
FPF20K*D24BE(R)-120	325x325	291x291	24 Vd.c.	-	59	610	-10 ~ +55	CE ■
FPF20K*D48BE(R)-120	325x325	291x291	48 Vd.c.	-	59	610	-10 ~ +55	CE ■
FPF20KG*115BE(R)-120	325x325	291x291	115 Va.c.	50/60	107/143	660/745	-10 ~ +55	CE ►
FPF20KG*230BE(R)-120	325x325	291x291	230 Va.c.	50/60	114/158	660/745	-10 ~ +55	CE ►
FPF20KG*400TBE(R)-120	325x325	291x291	400 3~	50/60	105/105	650/730	-10 ~ +55	CE ■
FPF20KG*115B(R)-110	325x325	291x291	115 Va.c.	50/60	120/135	650/730	-10 ~ +55	CE ►
FPF20KG*230B(R)-110	325x325	291x291	230 Va.c.	50/60	140/185	650/730	-10 ~ +55	CE ►
FPF20KG*400TB(R)-110	325x325	291x291	400 3~	50/60	93/123	650/730	-10 ~ +55	CE ■

(*) may be R for color RAL 7032 or U for color RAL 7035 (***) data with uncertainty of ±15%

■ UL not available ► UL approval is on request



GF Series fan filters

GF series for thick wall applications in both plastic and plate enclosures, thanks to its revolutionary mounting system with jacks.

Model	Dimensions	Cut-out	Voltage	Frequency	Rated Power	Max Air Flow	Rated Temp. Range	Approvals
	mm	mm	(V)	(Hz)	(W)	(m³/h)**	(°C)	
GF12KUG	150x150	125x125	-	-	-	-	-10 ~ +60	CE
GF12KU115BE (R)	150x150	125x125	115 Va.c.	50/60	17/15	45/50	-10 ~ +55	CE
GF12KU230BE (R)	150x150	125x125	230 Va.c.	50/60	17/15	45/50	-10 ~ +55	CE
GF12KU115B (R)	150x150	125x125	115 Va.c.	50/60	17/15	57/61	-10 ~ +50	CE
GF12KU230B (R)	150x150	125x125	230 Va.c.	50/60	17/15	57/61	-10 ~ +55	CE
GF12KUD24B (R)	150x150	125x125	24 Vd.c.	-	7.4	55	-10 ~ +55	CE
GF12KUD48B (R)	150x150	125x125	48 Vd.c.	-	7.7	55	-10 ~ +55	CE
GF15KUG	250x250	223x223	-	-	-	-	-10 ~ +60	CE
GF15KPU115BE (R)	250x250	223x223	115 Va.c.	50/60	17/15	115/127	-10 ~ +55	CE
GF15KPU230BE (R)	250x250	223x223	230 Va.c.	50/60	17/15	115/127	-10 ~ +55	CE
GF15KPUD24B (R)	250x250	223x223	24 Vd.c.	-	7.4	150	-10 ~ +55	CE
GF15KPUD48B (R)	250x250	223x223	48 Vd.c.	-	7.7	150	-10 ~ +55	CE
GF15KU115BE (R)	250x250	223x223	115 Va.c.	50/60	30/30	240/275	-10 ~ +55	CE
GF15KU230BE (R)	250x250	223x223	230 Va.c.	50/60	30/31	240/275	-10 ~ +50	CE
GF20KUG	325x325	290x290	-	-	-	-	-10 ~ +60	CE
GF20KU115BE (R)	325x325	290x290	115 Va.c.	50/60	50/64	515/550	-10 ~ +55	CE
GF20KU230BE (R)	325x325	290x290	230 Va.c.	50/60	70/85	515/550	-10 ~ +50	CE
GF20KU400TBE (R)	325x325	290x290	400 3~	50/60	71/93	515/550	-10 ~ +55	CE
GF20KGU115B (R)	325x325	290x290	115 Va.c.	50/60	112/148	590/670	-10 ~ +55	CE
GF20KGU230B (R)	325x325	290x290	230 Va.c.	50/60	138/164	590/670	-10 ~ +55	CE
GF20KGU400TB (R)	325x325	290x290	400 3~	50/60	93/123	590/670	-10 ~ +55	CE

(**) Data with uncertainty of ±15%

Roof exhaust units

A range of roof exhaust units to suck warm air out of the enclosure.

T Series



Model	Voltage	Frequency	Rated Power	Max Air Flow	Approvals
	(V)	(Hz)	(W)	(m³/h)**	
T19*115B	115 Va.c.	50/60	58/71	550/590	CE
T19*230B	230 Va.c.	50/60	62/78	550/590	CE
T22*115B	115 Va.c.	50/60	150/210	800/850	CE
T22*230B	230 Va.c.	50/60	158/213	800/850	CE

(*) may be R for color RAL 7032 or U for color RAL 7035

(**) data with uncertainty of ±15%

TP Series



Model	Voltage	Frequency	Rated Power	Max Air Flow	Protection Degree	Approvals
	(V)	(Hz)	(W)	(m³/h)**	IP	
TP19U115B	115 Va.c.	50/60	62/75	500/575	24	CE •
TP19U115B54	115 Va.c.	50/60	66/74	420/490	54	CE •
TP19U115B55	115 Va.c.	50/60	66/74	420/490	55	CE •
TP19U230B	230 Va.c.	50/60	67/83	500/575	24	CE •
TP19U230B54	230 Va.c.	50/60	70/83	420/490	54	CE •
TP19U230B55	230 Va.c.	50/60	70/83	420/490	55	CE •

• To order the cURus and cCSAus approved models, add the final numer "1" to the code.

(**) data with uncertainty of ±15%

Accessories for fan filters

Spare parts filter media



Model	Description
FOR IP54 VERSION	
M08FPF	FPF08/FF08 series
M12FPF-EU3	FPF12/FF12 series
M13FPF-EU3	FPF13/FF13 series
M15FPF-EU3	FPF15/FF15 series
M20FPF-EU3	FPF20/FF20 series
FOR IP55 VERSION	
M13FPF	FPF13/FF13 IP55 series
M15FPF	FPF15/FF15 IP55 series
M20FPF	FPF20/FF20 IP55 series

Plastic adaptors



Model	Description
FPFA12-7032G	plastic adaptor RAL 7032
FPFA12-7035G	plastic adaptor RAL 7035
FPFA12-9005G	plastic adaptor RAL 9005
FPFA15-7032G	plastic adaptor RAL 7032
FPFA15-7035G	plastic adaptor RAL 7035
FPFA20-7032G	plastic adaptor RAL 7032
FPFA20-7035G	plastic adaptor RAL 7035

Steel cover



Model	Description
SSC-08	steel cover for FPF08 and FF08
SSC-12	steel cover for FPF12 and FF12
SSC-13	steel cover for FPF13 and FF13
SSC-15	steel cover for FPF15 and FF15
SSC-20	steel cover for FPF20 and FF20

Document holder



Model
TPD-A4

Ambient control

Mechanical thermostats and hygrostats for temperature and humidity regulation in electrical enclosures, with DIN rail application.

Mechanical thermostats



Model	Rated Voltage	Rated Current	Contact Current carrying capacity	Setting Range	Differential (referred to set point)	Accuracy	Approvals
	(Va.c.) 50/60Hz	(A)	(A)		(K)	(K)	
°C VERSION							
TRT-10A230V-NC	110-250	10 (6*)	15	-10 ~ +80 °C	- 3	± 3	CE cURus
TRT-10A230V-NO	110-250	10 (6*)	15	-10 ~ +80 °C	+ 4 if A≤5 + 7 if A>5	± 3	CE cURus
°F VERSION							
TRT-10A230V-NCF	110-250	10 (6*)	15	+14 ~ +176 °F	- 3	± 3	CE cURus
TRT-10A230V-NOF	110-250	10 (6*)	15	+14 ~ +176 °F	+ 4 if A≤5 + 7 if A>5	± 3	CE cURus

NC = open on rise (red) NO = closed on rise (blue)

* () inductive load with $\cos \varphi = 0.6$

Twin thermostats



Model	Rated Voltage	Rated Current	Contact Current carrying capacity	Setting Range	Differential (referred to set point)	Accuracy	Approvals
	(Va.c.) 50/60Hz	(A)	(A)		(K)	(K)	
°C VERSION							
TRT2-10A230V-NCNC	110-250	10+10	15+15	-10 ~ +80 °C	- 3	± 3	CE cURus
TRT2-10A230V-NCNO	110-250	10+10	15+15	-10 ~ +80 °C	-3 (NC) / +4 if A≤5 +7 if A>5 (NO)	± 3	CE cURus
TRT2-10A230V-NONO	110-250	10+10	15+15	-10 ~ +80 °C	+4 if A≤5 +7 if A>5 (NO)	± 3	CE cURus
°F VERSION							
TRT2-10A230V-NCNCF	110-250	10+10	15+15	+14 ~ +176 °F	- 3	± 3	CE cURus
TRT2-10A230V-NCNOF	110-250	10+10	15+15	+14 ~ +176 °F	-3 (NC) / +4 if A≤5 +7 if A>5 (NO)	± 3	CE cURus
TRT2-10A230V-NONOF	110-250	10+10	15+15	+14 ~ +176 °F	+4 if A≤5 +7 if A>5 (NO)	± 3	CE cURus

NC = open on rise (red) NO = closed on rise (blue)

Change-over mechanical thermostats



Model	Rated Voltage	Rated Current	Contact Current	Setting Range	Differential (referred to set point)	Approvals
	(Va.c.) 50/60Hz	(A)	(A)	(°C)	(K)	
TRT-230V-S01	230	(Heating) a.c. 10 (4*), d.c. 30W (Cooling) a.c. 5 (2*), d.c. 30W	10	5 ~ 60	4 1 (with thermal retroaction)	CE

* () inductive load with $\cos \varphi = 0.6$

Mechanical hygrostats



Model	Rated Voltage	Rated Current	Setting Range	Differential (referred to set point)	Operating Ambient Temperature	Approvals
	(Va.c.) 50/60Hz	(A)	(% RH)	(% RH)	(°C)	
IGR35F	120-240	10-5	10 ~ 90	5	+10 ... + 60	CE cURus

Door limit switches



Model	a.c. Rated Voltage Range	a.c. Rated Current Range	d.c. Rated Voltage Range	d.c. Rated Current Range	Mechanical durability	Approvals
	(V) 50/60Hz	(A)	(V)	(A)	Millions of operations	
FC-001	24-400	10-1.8	24-250	2.8-0.27	15	CE cULus
FC-002	24-400	10-1.8	24-250	2.8-0.27	1	CE cULus
FC-003	24-400	10-1.8	24-250	2.8-0.27	15	CE cULus
FC-004	24-400	10-1.8	24-250	2.8-0.27	10	CE cULus
SA-FC01K	Plastic support for door limit switch fixing					

Anti-condensation heaters

A variety of heaters for the thermo-regulation of electrical cabinets, connectable by cable or terminal block, with DIN rail fastening. The ventilated version enhances the heating power up to a thermal capacity of 400W.

Heaters with cable



Model	Dimensions		Heating Power (W) *	Rated Voltage Range (Va.c.) 50/60 Hz - (Vd.c.)	External Surface (°C) **	Weight (Kg)
	h (mm)	l (mm)				
RACP-15	72	25	15	150-240	70	0.10
RACP-30	102	25	30	90-240	110	0.12
RAC-45	102	61	45	110-250	70	0.28
RAC-60	102	61	60	110-250	85	0.28
RAC-80	152	61	80	110-250	90	0.44
RAC-100	152	61	100	110-250	105	0.44
RAC-150	227	61	150	110-250	125	0.59
RACS-150	152	61	138	110-250	125	0.44
RAC-40-12V	102	61	40	12 Vd.c.	85	0.31

Heaters with terminal block



Model	Dimensions		Heating Power (W) *	Rated Voltage Range (Va.c.) 50/60 Hz	External Surface (°C) **	Weight (Kg)
	h (mm)	l (mm)				
RACM-45	117	61	45	110-250	70	0.29
RACM-60	117	61	60	110-250	85	0.29
RACM-80	167	61	80	110-250	90	0.41
RACM-100	167	61	100	110-250	105	0.41
RACM-150	242	61	150	110-250	125	0.56
RACMS-150	167	61	138	110-250	125	0.41

Ventilated heaters



Model	Dimensions		Heating Power (W) *	Rated Voltage (Va.c.) 50/60 Hz	External Surface (°C) **	Weight (Kg)
	h (mm)	l (mm)				
RACMV-250	197	61	250	230	70	0.49
RACMV-400	272	61	400	230	90	0.66



* The above values of heating power and temperature were obtained at 230 Va.c. 50Hz, at 12 Vd.c. for the model RAC-40-12V and at ambient temperature condition of 15±5°C after a working of 10 minutes. These values have an uncertainty of 10%.

** Temperatures have been obtained after a working of 10 minutes at ambient temperature condition of 23.5°C.



Heat pumps

Standard and customised thermoelectric units for small enclosures or electronic equipment in telecommunications and industrial automation fields. These units operate according to the principles of the semiconductors technology (Peltier effect).

Thermoelectric cooling units d.c version

Model	Cooling Power	Voltage	Rated Current	Max. Current	Operating Temp. Range	Rated Voltage Range	Weight	Approvals
	(W)	(Vd.c.)	(A)	(A)	(°C)	(Vd.c.)	(Kg)	
TCU501240IP55-7035	50	12	5.0	5.8	-20 ~ +70	7-13	4	CE
TCU502440IP55-7035	50	24	2.4	2.8	-20 ~ +70	17-27	4	CE
TCU1001240IP55-7035	100	12	9.2	11.0	-20 ~ +70	7-13	6	CE
TCU1002440IP55-7035	100	24	4.7	5.7	-20 ~ +70	17-27	6	CE
TCU1004840IP55-7035	100	48	2.4	3.0	-20 ~ +70	34-54	6	CE
TCU2001240IP55-7035	200	12	18.4	22.0	-20 ~ +70	7-13	12	CE
TCU2002440IP55-7035	200	24	9.5	11.5	-20 ~ +70	17-27	12	CE
TCU2004840IP55-7035	200	48	4.8	6.0	-20 ~ +70	34-54	12	CE



Thermoelectric cooling units a.c. version

Model	Cooling Power	Voltage	Input Power	Max. Input Power	Operating Temp. Range	Weight	IP Rating	Approvals
	(W)	(Va.c.)	(W)	(W)	(°C)	(Kg)		
TCU200AC40-SIP	201	88-264	245	306	-20 ~ +50	14	55	CE

Thermoelectric modules



Model	Max. Current I max	Max. Voltage V max	Max. Cooling Power Q _c max	Max. Temp. Differential ΔT max	Max. Operating Temp. T max	Dimensions W x L x H
	(A)	(Vd.c.)	(W)	(°C)	(°C)	(mm)
TM1-1274060-HXHP	6.0	15.3	60.0	67.0	125	40x40x3.8

Other models available on request

Enclosure lamps

Compact fluorescent lamps for indoor installation and additional set of options from multiple connection cable to a magnetic mounting system. Available also LED lamps with a metal fixing plate for an adjustable installation.



Accessories for lamps

Model	Description
CONNECTION CABLE	
CVL01-200	2000 mm
CVL01A-30	300 mm
MAGNETIC SUPPORT	
CLG-TSM1	-

Model	Rated Voltage (V a.c.)	Rated Frequency (Hz)	Power (W)	LED		Weight (Kg)	Approvals
				Number	Color		
LED LAMPS							
CLG-L307	115/230	50/60	7.0/7.0	12	White	0.200	CE

Model	Dimension Length (mm)	Rated Voltage (V a.c.)	Rated Frequency (Hz)	Power (W)	Light type & lamp holder	Cable Length (mm)	Approvals
ENCLOSURE LAMPS							
CLG-R236	277	230	50	6	T5 / G5	1,300	CE GS
CLG-R238	354	230	50	8	T5 / G5	1,800	CE
CLG-R2313	581	230	50	13	T5 / G5	1,800	CE
CLG-T236	270	230	50	6	T4 / G5	1,800	CE GS
CLG-T238	390	230	50	8	T4 / G5	1,800	CE GS
CLG-T2312	425	230	50	12	T4 / G5	1,800	CE GS
CLG-T2316	516	230	50	16	T4 / G5	1,800	CE
CLG-T2320	616	230	50	20	T4 / G5	1,800	CE
CLG-SS2310	498	230	50	10	T8 / G13	-	CE
CLG-SF2310	498	230	50	10	T8 / G13	-	CE

LED tubular lamps

LED tubular lamps for industrial and professional applications represent the ideal choice for illuminating cooling counters and displays, and combine energy saving with highly improved visual impression of the products, thanks to a good uniformity of light. These LED systems can easily replace the traditional fluorescent lamps, often without any changes, offering a perfect retrofit solution.



Type TL (T8)

Model	Dimension Length (mm)	Rated Frequency (Hz)	Power (W)	Color Temp. (K)	Lum. Flux (lm)	Approvals
TL-237-45PT	450	50/60	7.0	4,200	500	CE
TL-237-45WT	450	50/60	7.0	5,000	500	CE
TL-237-465WT	450	50/60	7.0	6,500	500	CE
TL-239-65WX	600	50/60	9.0	5,000	800	CE
TL-239-665WX	600	50/60	9.0	6,500	800	CE
TL-239-6PT	600	50/60	9.0	4,200	800	CE
TL-2314-965WT	900	50/60	14	5,000	1,400	CE
TL-2314-9PT	900	50/60	14	4,200	1,400	CE
TL-2315-105WT	970	50/60	15	5,000	1,400	CE
TL-2318-125WT	1,200	50/60	18	5,000	1,600	CE
TL-2318-1265WX	1,200	50/60	18	6,500	1,600	CE
TL-2318-12PT	1,200	50/60	18	5,000	1,600	CE
TL-2322-155WT	1,500	50/60	22	5,000	2,100	CE
TL-2322-15PT	1,500	50/60	22	4,200	2,100	CE

Type LL (T5)

Model	Dimension Length (mm)	Rated Frequency (Hz)	Power (W)	Color Temp. (K)	Lum. Flux (lm)	Approvals
LL-238-665WO	570	50/60	8	6,500	450 ± 30	CE
LL-2312-965WO	870	50/60	12	6,500	650 ± 30	CE
LL-2316-125WO	1,170	50/60	16	5,000	870 ± 30	CE
LL-2316-125WT	1,170	50/60	16	5,000	1,100 ± 30	CE

Visual and acoustic devices

The signal towers for the safety of plants and machinery offer a flexible combinations of up to 7 elements, including steady, flashing, rotating lights and buzzer. IP64 protection degree and a practical bayonet connection Ba 15d.



Connection element

Model	Color
ST70-CN-0	black

Acoustic element

Model	Color	Voltage
ST70-AN024-0	black	24V AC/DC
ST70-ANDV-0	black	115/230V AC

Other diameters and versions available on request.

Fixing systems

Model	Type
SF-1N-0	base with integrated tube H100mm
SF-2N-0	extension tube H100mm
SF-3N-0	adapter for 22mm holes
SF-4N-0	angle bracket 90°

Light elements

Model	Color	Type	Voltage
ST70-LRF-0	red	steady light	12-230V AC/DC
ST70-LAF-0	orange	steady light	12-230V AC/DC
ST70-LGF-0	yellow	steady light	12-230V AC/DC
ST70-LVF-0	green	steady light	12-230V AC/DC
ST70-LBF-0	blue	steady light	12-230V AC/DC
ST70-LWF-0	white	steady light	12-230V AC/DC
ST70-LRL024-0	red	flashing light	24V AC/DC
ST70-LAL024-0	orange	flashing light	24V AC/DC
ST70-LGL024-0	yellow	flashing light	24V AC/DC
ST70-LVL024-0	green	flashing light	24V AC/DC
ST70-LBL024-0	blue	flashing light	24V AC/DC
ST70-LWL024-0	white	flashing light	24V AC/DC
ST70-LRL115-0	red	flashing light	115V AC
ST70-LAL115-0	orange	flashing light	115V AC
ST70-LGL115-0	yellow	flashing light	115V AC
ST70-LVL115-0	green	flashing light	115V AC
ST70-LBL115-0	blue	flashing light	115V AC
ST70-LWL115-0	white	flashing light	115V AC
ST70-LRL230-0	red	flashing light	230V AC
ST70-LAL230-0	orange	flashing light	230V AC
ST70-LGL230-0	yellow	flashing light	230V AC
ST70-LVL230-0	green	flashing light	230V AC
ST70-LBL230-0	blue	flashing light	230V AC
ST70-LWL230-0	white	flashing light	230V AC
ST70-LRM024-0	red	LED multifunction light	24V AC/DC
ST70-LAM024-0	orange	LED multifunction light	24V AC/DC
ST70-LGM024-0	yellow	LED multifunction light	24V AC/DC
ST70-LVM024-0	green	LED multifunction light	24V AC/DC
ST70-LBM024-0	blue	LED multifunction light	24V AC/DC
ST70-LWM024-0	white	LED multifunction light	24V AC/DC

Bulbs

Model	Color	Type	Voltage
BL15D-R02410-0	red	LED	24V AC/DC
BL15D-G02410-0	orange-yellow	LED	24V AC/DC
BL15D-V02410-0	green	LED	24V AC/DC
BL15D-B02410-0	blue	LED	24V AC/DC
BL15D-W02410-0	white	LED	24V AC/DC
BL15D-R11510-0	red	LED	115V AC
BL15D-G11510-0	orange-yellow	LED	115V AC
BL15D-V11510-0	green	LED	115V AC
BL15D-B11510-0	blue	LED	115V AC
BL15D-W11510-0	white	LED	115V AC
BL15D-R23010-0	red	LED	230V AC
BL15D-G23010-0	orange-yellow	LED	230V AC
BL15D-V23010-0	green	LED	230V AC
BL15D-B23010-0	blue	LED	230V AC
BL15D-W23010-0	white	LED	230V AC
BF15D-T01205K-0	transparent	filament bulb	15V/5W
BF15D-T02405K-0	transparent	filament bulb	24V/5W
BF15D-T03005K-0	transparent	filament bulb	30V/5W
BF15D-T04805K-0	transparent	filament bulb	48V/5W
BF15D-T13005K-0	transparent	filament bulb	130V/5W
BF15D-T26005K-0	transparent	filament bulb	260V/5W

Filament bulbs in kit 10pcs.

Frame fans

A wide range of standard and custom designed models for both AC and DC brushless axial and centrifugal frame fans, including solutions specific to different ambient conditions (IP55, all metal and high temperature resistant fans).



Model	Dimensions	Max Air Flow	Rated Voltage	Noise	Bearing Type	Approvals
	(mm)	(m ³ /h)	(V)	(dB)		
AC Costech FRAME FANS						
A06G12HWBF00	60x60x30	14/17	115 Va.c.	27.0/28.0	Ball Bearing	CE cURus
A06G23HWBF00	60x60x30	14/17	230 Va.c.	27.0/28.0	Ball Bearing	CE cURus
A08A12MWSF00	80x80x25	28/34	115 Va.c.	29.0/34.0	Sleeve Bearing	CE cURus
A08A12MWB00	80x80x25	28/34	115 Va.c.	29.0/34.0	Ball Bearing	CE cURus
A08A12HWSF00	80x80x25	36/41	115 Va.c.	32.0/35.0	Sleeve Bearing	CE cURus
A08A12HWBF00	80x80x25	36/41	115 Va.c.	32.0/35.0	Ball Bearing	CE cURus
A08A23MWSF00	80x80x25	26/32	230 Va.c.	28.0/32.0	Sleeve Bearing	CE UR
A08A23MWB00	80x80x25	26/32	230 Va.c.	28.0/32.0	Ball Bearing	CE UR
A08A23HWSF00	80x80x25	36/41	230 Va.c.	32.0/35.0	Sleeve Bearing	CE UR
A08A23HWBF00	80x80x25	36/41	230 Va.c.	32.0/35.0	Ball Bearing	CE UR
A08B12LWSF00	80x80x38	33/42	115 Va.c.	28.0/32.0	Sleeve Bearing	CE cURus
A08B12LWB00	80x80x38	33/42	115 Va.c.	28.0/32.0	Ball Bearing	CE cURus
A08B12MWSF00	80x80x38	36/43	115 Va.c.	29.0/33.0	Sleeve Bearing	CE cURus
A08B12MWB00	80x80x38	36/43	115 Va.c.	29.0/33.0	Ball Bearing	CE cURus
A08B12HWSF00	80x80x38	41/51	115 Va.c.	32.0/36.0	Sleeve Bearing	CE cURus
A08B12HWBF00	80x80x38	41/51	115 Va.c.	32.0/36.0	Ball Bearing	CE cURus
A08B23LWSF00	80x80x38	33/42	230 Va.c.	28.0/32.0	Sleeve Bearing	CE UR
A08B23LWB00	80x80x38	33/42	230 Va.c.	28.0/32.0	Ball Bearing	CE UR
A08B23MWSF00	80x80x38	36/43	230 Va.c.	29.0/33.0	Sleeve Bearing	CE UR
A08B23MWB00	80x80x38	36/43	230 Va.c.	29.0/33.0	Ball Bearing	CE UR
A08B23HWSF00	80x80x38	41/51	230 Va.c.	32.0/36.0	Sleeve Bearing	CE UR
A08B23HWBF00	80x80x38	41/51	230 Va.c.	32.0/36.0	Ball Bearing	CE UR
A09A12MTSF00	92x92x25	43/55	115 Va.c.	29.0/33.0	Sleeve Bearing	CE cURus
A09A12MTB00	92x92x25	43/55	115 Va.c.	29.0/33.0	Ball Bearing	CE cURus
A09A12HTSF00	92x92x25	56/68	115 Va.c.	32.0/36.0	Sleeve Bearing	CE cURus
A09A12HTB00	92x92x25	56/68	115 Va.c.	32.0/36.0	Ball Bearing	CE cURus
A09A23MTSF00	92x92x25	51/63	230 Va.c.	28.0/32.0	Sleeve Bearing	CE UR
A09A23MTB00	92x92x25	51/63	230 Va.c.	28.0/32.0	Ball Bearing	CE UR
A09A23HTSF00	92x92x25	56/68	230 Va.c.	32.0/36.0	Sleeve Bearing	CE UR
A09A23HTB00	92x92x25	56/68	230 Va.c.	32.0/36.0	Ball Bearing	CE UR
A12A12MTSF00	120x120x25	87/105	115 Va.c.	33.0/35.0	Sleeve Bearing	CE cURus
A12A12MTB00	120x120x25	87/105	115 Va.c.	33.0/35.0	Ball Bearing	CE cURus
A12A12HTSF00	120x120x25	109/127	115 Va.c.	38.0/42.0	Sleeve Bearing	CE cURus
A12A12HTB00	120x120x25	109/127	115 Va.c.	38.0/42.0	Ball Bearing	CE cURus
A12A23MTSF00	120x120x25	87/105	230 Va.c.	34.0/36.0	Sleeve Bearing	CE UR
A12A23MTB00	120x120x25	87/105	230 Va.c.	34.0/36.0	Ball Bearing	CE UR
A12A23HTSF00	120x120x25	109/127	230 Va.c.	38.0/42.0	Sleeve Bearing	CE UR
A12A23HTB00	120x120x25	109/127	230 Va.c.	38.0/42.0	Ball Bearing	CE UR
A12B05HTSW00	120x120x38	150/167	24 Va.c.	41.0/44.5	Sleeve Bearing	CE
A12B05HTBW00	120x120x38	133/167	24 Va.c.	46.0/49.0	Ball Bearing	CE
A12B12LTSW00	120x120x38	122/113	115 Va.c.	42.0/40.0	Sleeve Bearing	CE cURus VDE
A12B12LTBW00	120x120x38	122/113	115 Va.c.	42.0/40.0	Ball Bearing	CE cURus VDE
A12B12MTSW00	120x120x38	126/133	115 Va.c.	44.0/46.0	Sleeve Bearing	CE cURus VDE
A12B12MTBW00	120x120x38	126/133	115 Va.c.	44.0/46.0	Ball Bearing	CE cURus VDE
A12B12HTSW00	120x120x38	136/168	115 Va.c.	46.0/49.0	Sleeve Bearing	CE cURus VDE
A12B12HTBW00	120x120x38	136/168	115 Va.c.	46.0/49.0	Ball Bearing	CE cURus VDE
A12B12STSW00	120x120x38	161/195	115 Va.c.	45.0/50.0	Sleeve Bearing	CE cURus VDE

Model	Dimensions	Max Air Flow	Rated Voltage	Noise	Bearing Type	Approvals
	(mm)	(m³/h)	(V)	(dB)		
A12B12STBW00	120x120x38	161/195	115 Va.c.	45.0/50.0	Ball Bearing	CE cURus VDE
A12B23ETSW00	120x120x38	85/83	230 Va.c.	29.0/28.0	Sleeve Bearing	CE VDE
A12B23ETBW00	120x120x38	85/83	230 Va.c.	29.0/28.0	Ball Bearing	CE VDE
A12B23LTSW00	120x120x38	114/102	230 Va.c.	43.0/42.0	Sleeve Bearing	CE cURus VDE
A12B23LTBW00	120x120x38	114/102	230 Va.c.	43.0/42.0	Ball Bearing	CE cURus VDE
A12B23MTSW00	120x120x38	133/143	230 Va.c.	43.0/45.0	Sleeve Bearing	CE cURus VDE
A12B23MTBW00	120x120x38	133/143	230 Va.c.	43.0/45.0	Ball Bearing	CE cURus VDE
A12B23HTSW00	120x120x38	148/182	230 Va.c.	46.0/49.0	Sleeve Bearing	CE cURus VDE
A12B23HTBW00	120x120x38	148/182	230 Va.c.	46.0/49.0	Ball Bearing	CE cURus VDE
A12B23STSW00	120x120x38	143/199	230 Va.c.	48.0/50.0	Sleeve Bearing	CE cURus VDE
A12B23STBW00	120x120x38	143/199	230 Va.c.	48.0/50.0	Ball Bearing	CE cURus VDE
A12R23HTSW00	120x120x38	150/167	230 Va.c.	48.0/54.0	Sleeve Bearing	CE cURus VDE
A12R23HTBW00	120x120x38	150/167	230 Va.c.	48.0/54.0	Ball Bearing	CE cURus VDE
A12W12HWW00	Ø 114x38	150/167	115 Va.c.	43.0/48.0	Ball Bearing	CE cURus
A12Z12HWSW00	Ø 114x38	150/167	115 Va.c.	43.0/48.0	Sleeve Bearing	CE
A12Z12HWW00	Ø 114x38	150/167	115 Va.c.	43.0/48.0	Ball Bearing	CE
A12W23HWW00	Ø 114x38	148/182	230 Va.c.	46.0/49.0	Ball Bearing	CE cURus
A12Z23HWSW00	Ø 114x38	148/182	230 Va.c.	46.0/49.0	Sleeve Bearing	CE
A12Z23HWW00	Ø 114x38	148/182	230 Va.c.	46.0/49.0	Ball Bearing	CE
A13B12HTBF00	127x127x38	174/204	115 Va.c.	46.0/50.0	Ball Bearing	CE cURus
A13B23HTBF00	127x127x38	174/204	230 Va.c.	46.0/50.0	Ball Bearing	CE cURus
C17B12HTBF00	172x150x38	300/360	115 Va.c.	54.0/58.0	Ball Bearing	CE cURus
C17B23HTBF00	172x150x38	300/360	230 Va.c.	54.0/58.0	Ball Bearing	CE cURus
A17C12HWW00	172x150x51	290/331	115 Va.c.	50.0/55.0	Ball Bearing	CE cURus
A17C23HWW00	172x150x51	290/331	230 Va.c.	50.0/55.0	Ball Bearing	CE cURus
C17C12HTBF00	172x150x51	348/384	115 Va.c.	53.0/58.0	Ball Bearing	CE cURus
C17C23HTBF00	172x150x51	348/384	230 Va.c.	53.0/58.0	Ball Bearing	CE cURus
C18C12HTBF00	Ø 172x51	348/384	115 Va.c.	50.0/55.0	Ball Bearing	CE cURus
C18C23HTBF00	Ø 172x51	348/384	230 Va.c.	50.0/55.0	Ball Bearing	CE cURus
C22S12HKBDK4	281x218x83	790/875	115 Va.c.	61.0/63.0	Ball Bearing	CE
C22S23HKBDK4	281x218x83	836/925	230 Va.c.	61.0/63.0	Ball Bearing	CE
C22S40HKBDK4	281x218x83	1.040/1.160	400 Va.c.	65.0/67.0	Ball Bearing	CE
DC Costech FRAME FANS						
D04E04HWST00	40x40x10	11	12 Vd.c.	26.0	Sleeve Bearing	CE cURus
D04E05HWST00	40x40x10	11	24 Vd.c.	26.0	Sleeve Bearing	CE cURus
D04E05HWBT00	40x40x10	11	24 Vd.c.	26.0	Ball Bearing	CE cURus
D04D04HWSZ00	40x40x20	15	12 Vd.c.	36.0	Sleeve Bearing	CE cURus
D04D04HWBZ00	40x40x20	15	12 Vd.c.	36.0	Ball Bearing	CE cURus
D04D05HWSZ00	40x40x20	15	24 Vd.c.	31.9	Sleeve Bearing	CE cURus
D04D05HWBZ00	40x40x20	15	24 Vd.c.	36.0	Ball Bearing	CE cURus
D06F04HWSA00	60x60x15	27	12 Vd.c.	33.4	Sleeve Bearing	CE UR
D06F04HWBA00	60x60x15	27	12 Vd.c.	35.2	Ball Bearing	CE UR
D06F05HWSA00	60x60x15	26	24 Vd.c.	35.2	Sleeve Bearing	CE
D06F05HWBA00	60x60x15	27	24 Vd.c.	33.4	Ball Bearing	CE
D06A04HWSA00	60x60x25	42	12 Vd.c.	36.8	Sleeve Bearing	CE cURus
D06A04HWBA00	60x60x25	42	12 Vd.c.	36.8	Ball Bearing	CE cURus
D06A05HWSA00	60x60x25	42	24 Vd.c.	35.2	Sleeve Bearing	CE cURus
D06A05HWBA00	60x60x25	42	24 Vd.c.	35.2	Ball Bearing	CE cURus
D08D04HWSA00	80x80x20	49	12 Vd.c.	34.0	Sleeve Bearing	CE UR
D08D05HWBA00	80x80x20	49	24 Vd.c.	32.4	Ball Bearing	CE UR
D08A04HWSA00	80x80x25	68	12 Vd.c.	33.4	Sleeve Bearing	CE cURus
D08A05HWSA00	80x80x25	70	24 Vd.c.	36.7	Sleeve Bearing	CE UR
D08A05HWBA00	80x80x25	70	24 Vd.c.	36.2	Ball Bearing	CE UR
D09A04HWSZ00	92x92x25	95	12 Vd.c.	37.5	Sleeve Bearing	CE cURus

Model	Dimensions	Max Air Flow	Rated Voltage	Noise	Bearing Type	Approvals
	(mm)	(m³/h)	(V)	(dB)		
D09A05HWSZ00	92x92x25	95	24 Vd.c.	37.5	Sleeve Bearing	CE cURus
D09A05HWBZ00	92x92x25	95	24 Vd.c.	37.5	Ball Bearing	CE cURus
D12A04HWSZ00	120x120x25	151	12 Vd.c.	39.1	Sleeve Bearing	CE cURus
D12A04SWSZ00	120x120x25	168	12 Vd.c.	43.3	Sleeve Bearing	CE cURus
D12A05HWSZ00	120x120x25	151	24 Vd.c.	39.1	Sleeve Bearing	CE cURus
D12A05HWBZ00	120x120x25	149	24 Vd.c.	39.1	Ball Bearing	CE cURus
D12A05SWBZ00	120x120x25	168	24 Vd.c.	43.3	Ball Bearing	CE cURus
D12B04HWBZ00	120x120x38	179	12 Vd.c.	42.8	Ball Bearing	CE UR
D12B05HWSZ00	120x120x38	178	24 Vd.c.	46.7	Sleeve Bearing	CE UR
D12B05HWBZ00	120x120x38	178	24 Vd.c.	42.8	Ball Bearing	CE cURus
D12B05SWBZ00	120x120x38	204	24 Vd.c.	48.0	Ball Bearing	CE cURus
D12B07HWBA00	120x120x38	178.0	48 Vd.c.	46.8	Ball Bearing	CE UR
D17C05HWBA00	172x150x51	450	24 Vd.c.	60.0	Ball Bearing	CE cURus
DC1G05MWBA01	120x120x31	48	24 Vd.c.	49.0	Ball Bearing	CE cURus

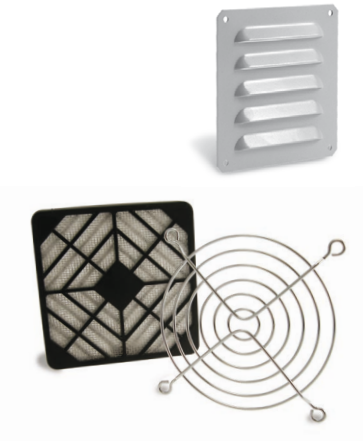
Accessories for frame fans

Metal fan guards
25
40
45
52
60
80
92
120
127
150
150/S
GMP200NK
GMP250NK
G120M-7035

Plastic fan guards
G40
G60
G80
G92
G120
G150
G120
Fast assembly plastic fan guards
G120/S

Plastic filters
F40/MR
F60/MR
F80/MR
F92/MR
F120/MR
F150/MR
Metal filters
FM/60
FM/80
FM/92
FM/120
FM/150

Spare filter media
M40
M60
M80
M92
M120
M150



Plastic rivets
FAR175TX
FAR225TX

X= P (flat head); S (V-shaped head)
Y= N (black RAL 9005); R (grey RAL 7032)

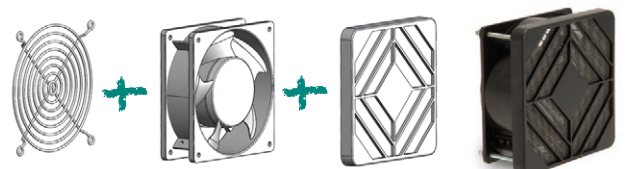


Elastic rivets
EAR4401N

Frame fans in kit

119x119x38mm frame fans with guard and mesh, supplied in a kit solution (not assembled).

Model
A12B23MTBAQ109



Special frame fans



Model	Dimensions	Max Air Flow	Rated Voltage	Noise	Bearing Type	Approvals
	(mm)	(m³/h)	(V)	(dB)		
IP55 Va.c. FRAME FANS						
A06G23HWBFF0	60x60x30	14/17	230 Va.c.	27.0/28.0	Ball Bearing	CE
A08B12HWBFF0	80x80x38	41/51	115 Va.c.	32.0/36.0	Ball Bearing	CE
A08B23HWBFF0	80x80x38	41/51	230 Va.c.	32.0/36.0	Ball Bearing	CE
A12B05HTBWF0	120x120x38	150/167	24 Va.c.	41.0/44.5	Ball Bearing	CE
A12B05LTBWF0	120x120x38	98/107	24 Va.c.	35.0/37.0	Ball Bearing	CE
A12B12ETBKF0	120x120x38	78/84	115 Va.c.	27.0/28.0	Ball Bearing	CE
A12B12HWBWF0	120x120x38	136/168	115 Va.c.	46.0/49.0	Ball Bearing	CE
A12B12LTBKF0	120x120x38	122/114	115 Va.c.	32.0/30.0	Ball Bearing	CE
A12B23ETBKF0	120x120x38	78/84	230 Va.c.	27.0/28.0	Ball Bearing	CE
A12B23HTBKF0	120x120x38	165/190	230 Va.c.	37.0/41.0	Ball Bearing	CE
A12B23HWBAF0	120x120x38	155/174	230 Va.c.	42.6/47.0	Ball Bearing	CE
A12B23HWBWF0	120x120x38	148/182	230 Va.c.	46.0/49.0	Ball Bearing	CE
A12B23LTBKF0	120x120x38	120/114	230 Va.c.	32.0/30.0	Ball Bearing	CE
A12B23LTBWF0	120x120x38	114/102	230 Va.c.	43.0/42.0	Ball Bearing	CE
A12B23LWBWF0	120x120x38	114/102	230 Va.c.	43.0/42.0	Ball Bearing	CE
A12B23STBWF0	120x120x38	143/199	230 Va.c.	48.0/50.0	Ball Bearing	CE
A12B23SWBWF0	120x120x38	143/199	230 Va.c.	48.0/50.0	Ball Bearing	CE
A12R23HTBKF0	120x120x38	158/187	230 Va.c.	38.0/45.0	Ball Bearing	CE
A12W23HWBWF0	113x113x38	150/180	230 Va.c.	46.0/49.0	Ball Bearing	CE
A12W23SWBWF0	113x113x38	165/200	230 Va.c.	48.0/50.0	Ball Bearing	CE
A12Z23HWBKF0	113x113x38	162/192	230 Va.c.	37.0/41.0	Ball Bearing	CE
A12Z23HWBWF0	113x113x38	140/155	230 Va.c.	42.0/45.0	Ball Bearing	CE
A17M12SWBMF0	172x150x55	332/391	115 Va.c.	49.0/53.0	Ball Bearing	CE
A17M23SWBMF0	172x150x55	332/391	230 Va.c.	49.0/53.0	Ball Bearing	CE
IP55 Vd.c. FRAME FANS						
D08A04HWBAF0	80x80x25	66	12 Vd.c.	34.4	Ball Bearing	CE cURus
D09A04HWBZF0	92x92x25	95	12 Vd.c.	37.5	Ball Bearing	CE
D12A05HWBZF0	120x120x25	151	24 Vd.c.	39.1	Ball Bearing	CE
D12B05HWBAF0	120x120x25	149	48 Vd.c.	39.1	Ball Bearing	CE
HTR AC FRAME FANS						
A09B12HWBMT0	92x92x38	75/87	115 Va.c.	37.0/42.0	Ball Bearing	CE
A09B23HWBMT0	92x92x38	75/87	230 Va.c.	37.0/42.0	Ball Bearing	CE cURus
A12B12HTBMT0	120x120x38	150/175	115 Va.c.	42.0/46.0	Ball Bearing	CE
A12B23HTBMT0	120x120x38	150/175	230 Va.c.	42.0/46.0	Ball Bearing	CE cURus
A12B12LTBMT0	120x120x38	110/115	115 Va.c.	33.0/35.0	Ball Bearing	CE
A12B23LTBMT0	120x120x38	110/115	230 Va.c.	33.0/35.0	Ball Bearing	CE cURus
A17M12SWBMT0	172x150x55	332/391	115 Va.c.	49.0/53.0	Ball Bearing	CE cURus
A17M23SWBMT0	172x150x55	332/391	230 Va.c.	49.0/53.0	Ball Bearing	CE cURus
A17T12SWBMT0	172x150x55	383/434	115 Va.c.	58.0/61.0	Ball Bearing	CE cURus
A17T23SWBMT0	172x150x55	383/434	230 Va.c.	58.0/61.0	Ball Bearing	CE cURus
ALL METAL Vc.a. FRAME FANS						
A09B12HWBM00	92x92x38	75/87	115 Va.c.	37.0/42.0	Ball Bearing	CE cURus
A09B23HWBM00	92x92x38	75/87	230 Va.c.	37.0/42.0	Ball Bearing	CE cURus
A12B12HTBM00	120x120x38	151/175	115 Va.c.	42.0/46.0	Ball Bearing	CE cURus
A12B23HTBM00	120x120x38	151/175	230 Va.c.	42.0/46.0	Ball Bearing	CE cURus
A12B12LTBM00	120x120x38	107/114	115 Va.c.	33.0/35.0	Ball Bearing	CE cURus
A12B23LTBM00	120x120x38	107/114	230 Va.c.	33.0/35.0	Ball Bearing	CE cURus
A17M12SWBM00	172x150x55	332/391	115 Va.c.	49.0/53.0	Ball Bearing	CE cURus
A17M23SWBM00	172x150x55	332/391	230 Va.c.	49.0/53.0	Ball Bearing	CE cURus
A17T12SWBM00	172x150x55	383/434	115 Va.c.	58.0/61.0	Ball Bearing	CE cURus
A17T23SWBM00	172x150x55	383/434	230 Va.c.	58.0/61.0	Ball Bearing	CE cURus
C25S23HKBE00	280x280x80	1.635/1.850	230 Va.c.	67.0/70.0	Ball Bearing	CE
C25S12HKBE00	280x280x80	1.705/1.880	115 Va.c.	67.0/70.0	Ball Bearing	CE
C25S40HKBE00	280x280x80	1.535/1.680	400 Va.c.	67.0/69.0	Ball Bearing	CE
EC (ELECTRONICALLY COMMUTATED) FRAME FANS						
E08B12HWBL00	80x80x38	64/68	115 Va.c.	35.0/37.0	Ball Bearing	CE
E08B23HWBL00	80x80x38	68/73	230 Va.c.	37.0/39.0	Ball Bearing	CE
E12B23HWBL00	120x120x38	198/206	230 Va.c.	45.0/46.8	Ball Bearing	CE
E12B23LWBL00	120x120x38	132/138	230 Va.c.	34.0/35.7	Ball Bearing	CE
E12B23MWBL00	120x120x38	169/176	230 Va.c.	40.0/41.8	Ball Bearing	CE