

Product manual

RHF-5P and RHF-8P

High efficient double-stage passive harmonic filter

Power Range **1.1kW – 450kW**
Voltage available **380V – 690V (50Hz / 60Hz)**



Marine



Buildings



Oil & Gas



Water
Treatment



General
Industry

Technical data and dimension diagrams

6.5 Rating values

Device series		RHF 380V	RHF 400V	RHF 460V	RHF 500V	RHF 600V	RHF 690V
Nominal range of the line-to-line line voltage	$U_N[V]$	$380 \leq U_N \leq 415$	$380 \leq U_N \leq 415$	$440 \leq U_N \leq 480$	500	600	690
Tolerance of the line-to-line line voltage	$U_N[V]$	$342 \leq U_N \leq 456$	$342 \leq U_N \leq 456$	$396 \leq U_N \leq 528$	$450 \leq U_N \leq 550$	$540 \leq U_N \leq 660$	$540 \leq U_N \leq 759$
Power frequency	$f_N[Hz]$	$60 \pm 2 \%$	$50 \pm 2 \%$	$60 \pm 2 \%$	$50 \pm 2 \%$	$60 \pm 2 \%$	$50 \pm 2 \%$
Overload ability		1,5					
* Efficiency	$\eta[\%]$	ca. 98,5-99,5					
** THD I	$[\%]$	5% / 8% **					
cos φ		at 75% I_N 0,85 cap. at 100% I_N 0,99 cap. at 150% I_N 1,0 cap.					
* Cooling air requirement	m^3 / h	a) Installation size X1.3-X2.3: 200 m^3 / h b) Installation size X3.3-X6.3: 350 m^3 / h c) Installation size X7.3-X8.3: 700 m^3 / h					
Power reduction	$[\%/K]$ $[\%/m]$	See figure 7 $1000m \ddot{u}NN < h \leq 4000m \ddot{u}NN \Rightarrow 5\%/1000m$					

Table 4: Rating values

* Depended on the device type and design

** At observation of the following connecting conditions: THDv < 2%, standard conformable electrical networks

Technical data and dimension diagrams

380V / 60Hz / 8% THDi

Revcon Filter RHF-8P	Order code	Input current [A]	max current [A]	Motor size*	Filter encl.	Weight [kg]	Power- loss [W]
RHF-8P 1.1-380-60-20-C	25001100	2.2	3.3	1.1kW	X0.3	6	33
RHF-8P 2.2-380-60-20-C	25001101	4.2	6.3	2.2kW	X0.3	9	62
RHF-8P 4.0-380-60-20-C	25001102	7.3	11	4.0kW	X1.3	14	82
RHF-8P 5.5-380-60-20-C	25001103	10	15	5.5kW	X1.3 if	14	93
RHF-8P 7.5-380-60-20-C	25001104	14	21	7.5kW	X1.3 ef	15	103
RHF-8P 11-380-60-20-C	25001105	22	33	11kW	X2.3 if	21	191
RHF-8P 15-380-60-20-C	25001106	27	41	15kW	X2.3 if	24	209
RHF-8P 18.5-380-60-20-C	25001107	32	48	18.5kW	X3.3 if	33	203
RHF-8P 22-380-60-20-C	25001108	38	57	22kW	X3.3 if	37	212
RHF-8P 30-380-60-20-C	25001109	52	78	30kW	X3.3 if	39	244
RHF-8P 37-380-60-20-C	25001110	63	95	37kW	X4.3 if	44	322
RHF-8P 45-380-60-20-C	25001111	76	114	45kW	X4.3 ef	56	354
RHF-8P 55-380-60-20-C	25001112	92	138	55kW	X5.3 ef	62	398
RHF-8P 75-380-60-20-C	25001113	125	188	75kW	X5.3 ef	74	458
RHF-8P 90-380-60-20-C	25001114	150	225	90kW	X6.3 if	85	662
RHF-8P 110-380-60-20-C	25001115	182	273	110kW	X6.3 if	102	713
RHF-8P 132-380-60-20-C	25001116	217	326	132kW	X7.3 if	119	804
RHF-8P 160-380-60-20-C	25001117	262	393	160kW	X7.3 if	136	845
RHF-8P 185-380-60-20-C	25001118	304	456	185kW	X8.3 if	142	892
RHF-8P 200-380-60-20-C	25001119	328	492	200kW	X8.3 ef	163	1115
RHF-8P 220-380-60-20-C	25001120	360	540	220kW	X8.3 ef	185	1235
RHF-8P 250-380-60-20-C	25001121	410	615	250kW	X8.3 ef	205	1266
RHF-8P 280-380-60-20-C	25001122	460	690	280kW	X8.3 ef	205	1424

Technical data and dimension diagrams

380V / 60Hz / 5% THDi

Revcon Filter RHF-5P	Order code	Input current [A]	max current [A]	Motor size*	Filter encl.	Weight [kg]	Power- loss [W]
RHF-5P 1.1-380-60-20-C	25002100	2.2	3.3	1.1kW	X0.3	6	44
RHF-5P 2.2-380-60-20-C	25002101	4.2	6.3	2.2kW	X0.3	9	73
RHF-5P 4.0-380-60-20-C	25002102	7.3	11	4.0kW	X1.3 if	18	102
RHF-5P 5.5-380-60-20-C	25002103	10	15	5.5kW	X1.3 if	18	131
RHF-5P 7.5-380-60-20-C	25002104	14	21	7.5kW	X1.3 ef	19	169
RHF-5P 11-380-60-20-C	25002105	22	33	11kW	X2.3 ef	29	243
RHF-5P 15-380-60-20-C	25002106	27	41	15kW	X2.3 ef	33	283
RHF-5P 18.5-380-60-20-C	25002107	32	48	18.5kW	X3.3 if	52	305
RHF-5P 22-380-60-20-C	25002108	38	57	22kW	X3.3 if	53	366
RHF-5P 30-380-60-20-C	25002109	52	78	30kW	X3.3 if	58	452
RHF-5P 37-380-60-20-C	25002110	63	95	37kW	X4.3 if	76	542
RHF-5P 45-380-60-20-C	25002111	76	114	45kW	X4.3 ef	98	658
RHF-5P 55-380-60-20-C	25002112	92	138	55kW	X5.3 ef	104	717
RHF-5P 75-380-60-20-C	25002113	125	188	75kW	X5.3 ef	106	812
RHF-5P 90-380-60-20-C	25002114	150	225	90kW	X6.3 ef	126	932
RHF-5P 110-380-60-20-C	25002115	182	273	110kW	X6.3 ef	135	1020
RHF-5P 132-380-60-20-C	25002116	217	326	132kW	X7.3 if	172	1134
RHF-5P 160-380-60-20-C	25002117	262	393	160kW	X7.3 if	206	1228
RHF-5P 185-380-60-20-C	25002118	304	456	185kW	X8.3 if	221	1346
RHF-5P 200-380-60-20-C	25002119	328	492	200kW	X8.3 ef	230	1450
RHF-5P 220-380-60-20-C	25002120	360	540	220kW	X8.3 ef	265	1500
RHF-5P 250-380-60-20-C	25002121	410	615	250kW	X8.3 ef	272	1530
RHF-5P 280-380-60-20-C	25002122	460	690	280kW	X8.3 ef	273	1718

Technical data and dimension diagrams

400V / 50Hz / 8% THDi

Revcon Filter RHF-5P	Order code	Input current [A]	max current [A]	Motor size*	Filter encl.	Weight [kg]	Power- loss [W]
RHF-8P 1.1-400-50-20-C	25001000	2.2	3.3	1.1kW	X0.3	6	33
RHF-8P 2.2-400-50-20-C	25001001	4.2	6.3	2.2kW	X0.3	9	62
RHF-8P 4.0-400-50-20-C	25001002	7.3	11	4.0kW	X1.3 if	18	82
RHF-8P 5.5-400-50-20-C	25001003	10	15	5.5kW	X1.3 if	14	93
RHF-8P 7.5-400-50-20-C	25001004	14	21	7.5kW	X1.3 ef	15	103
RHF-8P 11-400-50-20-C	25001005	22	33	11kW	X2.3 if	21	191
RHF-8P 15-400-50-20-C	25001006	27	41	15kW	X2.3 if	24	209
RHF-8P 18.5-400-50-20-C	25001007	32	48	18.5kW	X3.3 if	33	203
RHF-8P 22-400-50-20-C	25001008	38	57	22kW	X3.3 if	37	212
RHF-8P 30-400-50-20-C	25001009	52	78	30kW	X3.3 if	39	244
RHF-8P 37-400-50-20-C	25001010	63	95	37kW	X4.3 if	44	322
RHF-8P 45-400-50-20-C	25001011	76	114	45kW	X4.3 ef	56	354
RHF-8P 55-400-50-20-C	25001012	92	138	55kW	X5.3 ef	62	398
RHF-8P 75-400-50-20-C	25001013	125	188	75kW	X5.3 ef	74	458
RHF-8P 90-400-50-20-C	25001014	150	225	90kW	X6.3 if	85	662
RHF-8P 110-400-50-20-C	25001015	182	273	110kW	X6.3 if	102	713
RHF-8P 132-400-50-20-C	25001016	217	326	132kW	X7.3 if	119	804
RHF-8P 160-400-50-20-C	25001017	262	393	160kW	X7.3 if	136	845
RHF-8P 185-400-50-20-C	25001018	304	456	185kW	X8.3 if	142	892
RHF-8P 200-400-50-20-C	25001019	328	492	200kW	X8.3 if	163	1115
RHF-8P 220-400-50-20-C	25001020	360	540	220kW	X8.3 ef	185	1235
RHF-8P 250-400-50-20-C	25001021	410	615	250kW	X8.3 ef	205	1266
RHF-8P 280-400-50-20-C	25001022	460	690	280kW	X8.3 ef	205	1424

Technical data and dimension diagrams

400V / 50Hz / 5% THDi

Revcon Filter RHF-5P	Order code	Input current [A]	max current [A]	Motor size*	Filter encl.	Weight [kg]	Power- loss [W]
RHF-5P 1.1-400-50-20-C	25002000	2.2	3.3	1.1kW	X0.3	6	44
RHF-5P 2.2-400-50-20-C	25002001	4.2	6.3	2.2kW	X0.3	9	73
RHF-5P 4.0-400-50-20-C	25002002	7.3	11	4.0kW	X1.3 if	18	102
RHF-5P 5.5-400-50-20-C	25002003	10	15	5.5kW	X1.3 if	18	131
RHF-5P 7.5-400-50-20-C	25002004	14	21	7.5kW	X1.3 ef	19	169
RHF-5P 11-400-50-20-C	25002005	22	33	11kW	X2.3 ef	29	243
RHF-5P 15-400-50-20-C	25002006	27	41	15kW	X2.3 ef	33	283
RHF-5P 18.5-400-50-20-C	25002007	32	48	18.5kW	X3.3 if	52	305
RHF-5P 22-400-50-20-C	25002008	38	57	22kW	X3.3 if	53	366
RHF-5P 30-400-50-20-C	25002009	52	78	30kW	X3.3 if	58	452
RHF-5P 37-400-50-20-C	25002010	63	95	37kW	X4.3 if	76	542
RHF-5P 45-400-50-20-C	25002011	76	114	45kW	X4.3 ef	98	658
RHF-5P 55-400-50-20-C	25002012	92	138	55kW	X5.3 ef	104	717
RHF-5P 75-400-50-20-C	25002013	125	188	75kW	X5.3 ef	106	812
RHF-5P 90-400-50-20-C	25002014	150	225	90kW	X6.3 ef	126	932
RHF-5P 110-400-50-20-C	25002015	182	273	110kW	X6.3 ef	135	1020
RHF-5P 132-400-50-20-C	25002016	217	326	132kW	X7.3 if	172	1134
RHF-5P 160-400-50-20-C	25002017	262	393	160kW	X7.3 if	206	1228
RHF-5P 185-400-50-20-C	25002018	304	456	185kW	X8.3 if	221	1346
RHF-5P 200-400-50-20-C	25002019	328	492	200kW	X8.3 ef	230	1450
RHF-5P 220-400-50-20-C	25002020	360	540	220kW	X8.3 ef	265	1500
RHF-5P 250-400-50-20-C	25002021	410	615	250kW	X8.3 ef	272	1530
RHF-5P 280-400-50-20-C	25002022	460	690	280kW	X8.3 ef	273	1718

Technical data and dimension diagrams

460V / 60Hz / 8% THDi

Revcon Filter RHF-8P	Order code	Input current [A]	max current [A]	Motor size*	Filter encl.	Weight [kg]	Power- loss [W]
RHF-8P 5.5-460-60-20-C	25001053	10	15	5.5kW	X1.3 if	14	93
RHF-8P 7.5-460-60-20-C	25001054	14	21	7.5kW	X1.3 ef	15	103
RHF-8P 11-460-60-20-C	25001055	19	29	11kW	X2.3 if	21	191
RHF-8P 15-460-60-20-C	25001056	25	38	15kW	X2.3 if	24	209
RHF-8P 18.5-460-60-20-C	25001057	31	47	18.5kW	X3.3 if	33	203
RHF-8P 22-460-60-20-C	25001058	36	54	22kW	X3.3 if	37	212
RHF-8P 30-460-60-20-C	25001059	48	72	30kW	X3.3 if	39	244
RHF-8P 37-460-60-20-C	25001060	60	90	37kW	X4.3 if	44	322
RHF-8P 45-460-60-20-C	25001061	73	110	45kW	X4.3 ef	56	344
RHF-8P 55-460-60-20-C	25001062	95	143	55kW	X5.3 ef	62	398
RHF-8P 75-460-60-20-C	25001063	118	177	75kW	X5.3 ef	74	458
RHF-8P 90-460-60-20-C	25001064	154	231	90kW	X6.3 if	85	662
RHF-8P 110-460-60-20-C	25001065	154	231	110kW	X6.3 if	85	662
RHF-8P 132-460-60-20-C	25001066	183	275	132kW	X6.3 if	102	713
RHF-8P 160-460-60-20-C	25001067	231	347	160kW	X7.3 if	119	804
RHF-8P 185-460-60-20-C	25001068	291	437	185kW	X7.3 if	142	845
RHF-8P 200-460-60-20-C	25001069	291	437	200kW	X7.3 if	142	845
RHF-8P 220-460-60-20-C	25001070	355	533	220kW	X7.3 ef	163	1115
RHF-8P 250-460-60-20-C	25001071	355	533	250kW	X7.3 ef	163	1115
RHF-8P 280-460-60-20-C	25001072	380	570	280kW	X7.3 ef	172	1115
RHF-8P 315-460-60-20-C	25001073	436	654	315kW	X8.3 ef	205	1482