

Ratings, types and voltages

ACS800-X04, supply module, $U_N = 400\text{ V}$



Nominal ratings				No-overload use	Light-overload use		Heavy-duty use		Heat dissipation	Type designation	Frame size
$I_{cont. max}$ A (AC)	$I_{cont. max}$ A (DC)	I_{max} A (DC)	S_N kVA	$P_{cont. max}$ kW (DC)	I_N A (DC)	P_N kW (DC)	I_{hd} A (DC)	P_{hd} kW (DC)	kW		

$U_N = 400\text{ V}$ (Range 380 to 415 V). The power ratings are valid at nominal voltage 400 V.

IGBT supply module (ISU)

5.3	6.4	9.3	3.8	3.8	6.2	3.7	4.7	2.7	0.3	ACS800-204-0003-3	R2i + RLCL-01-5
11.3	13.7	19.9	8.1	8.0	13.2	8.0	9.9	5.8	0.5	ACS800-204-0008-3	R2i + RLCL-02-5
27.7	33.6	48.7	20.0	19.8	32.3	20	24.3	14.3	0.8	ACS800-204-0021-3	R3i + RLCL-03-5
44.9	54.4	78.7	32.2	31.9	52.2	32	39.4	23.1	1.3	ACS800-204-0031-3	R4i + RLCL-11-5
84.0	101.9	147.4	60.3	59.7	97.8	60	73.7	43.3	2.2	ACS800-204-0061-3	R5i + RLCL-12-5
182	221	330	131	130	212	124	165	97	3.8	ACS800-204-0135-3	R7i + ALCL-04-5
224	272	406	161	159	261	153	203	119	4.2	ACS800-204-0155-3	R7i + ALCL-05-5
284	344	471	204	202	331	194	258	151	5.9	ACS800-204-0200-3	R8i + ALCL-12-5
378	458	627	272	269	440	258	343	201	8	ACS800-204-0260-3	R8i + ALCL-13-5
473	573	784	340	336	550	323	429	252	10.3	ACS800-204-0330-3	R8i + ALCL-14-5
630	764	1046	453	448	733	430	571	335	14.6	ACS800-204-0440-3	R8i + ALCL-15-5
945	1146	1568	679	672	1100	646	857	503	20.5	ACS800-204-0660-3	2xR8i + ALCL-24-5
1235	1497	2049	888	879	1437	844	1120	657	28.3	ACS800-204-0860-3	2xR8i + ALCL-25-5
1833	2223	3042	1318	1304	2134	1252	1662	976	41.7	ACS800-204-1270-3	3xR8i + 2xALCL-24-5
2419	2933	4015	1739	1722	2816	1653	2194	1288	54.8	ACS800-204-1680-3	4xR8i + 2xALCL-25-5
3591	4354	5960	2581	2555	4180	2453	3257	1911	81	ACS800-204-2490-3	6xR8i + 3xALCL-25-5

6-pulse diode supply unit (DSU)

286	350	462	198	183	335	175	280	147	1.5	ACS800-304-0320-7	D3
408	500	700	283	262	480	251	400	210	2.4	ACS800-304-0450-7	D3
571	700	924	396	367	670	351	560	293	3.8	ACS800-704-0640-7	D4
816	1000	1400	566	524	960	503	800	419	5	ACS800-704-0910-7	D4
1143	1400	1848	792	733	1340	702	1120	587	7.6	ACS800-704-1370-7	2xD4
1518	1860	2604	1052	974	1790	938	1490	780	10	ACS800-704-1810-7	2xD4
2278	2790	3906	1578	1461	2685	1406	2230	1168	15	ACS800-704-2720-7	3xD4
3037	3720	5208	2104	1949	3580	1875	2980	1561	20	ACS800-704-3630-7	4xD4
3796	4650	6510	2630	2436	4475	2344	3720	1949	25	ACS800-704-4540-7	5xD4

6-pulse regenerative thyristor supply unit (TSU)

981	1202	1947	680	639	1136	604	880	468	6.3	ACS800-404-0680-3	2xB4 + choke
1617	1980	3208	1120	1053	1872	995	1450	721	10.2	ACS800-404-1120-3	2xB4 + choke
2449	3000	4860	1697	1595	2838	1509	2244	1193	16.5	ACS800-404-1700-3	2xB5 + choke
2858	3500	5670	1980	1861	3311	1760	2618	1392	20.8	ACS800-404-2100-3	2xB5 + choke

12-pulse diode supply unit (DSU)

571	700	924	396	367	670	351	560	293	3.8	ACS800-704-0640-7	D4
816	1000	1400	566	524	960	503	800	419	5	ACS800-704-0910-7	D4
1143	1400	1848	792	733	1340	702	1120	587	7.6	ACS800-704-1370-7	2xD4
1518	1860	2604	1052	974	1790	938	1490	780	10	ACS800-704-1810-7	2xD4
2278	2790	3906	1578	1461	2685	1406	2230	1168	15	ACS800-704-2720-7	3xD4
3037	3720	5208	2104	1949	3580	1875	2980	1561	20	ACS800-704-3630-7	4xD4
3796	4650	6510	2630	2436	4475	2344	3720	1949	25	ACS800-704-4540-7	5xD4

Dimensions

Frame size	Height mm	Width mm	Depth mm	Weight kg	Noise level dB(A)	Air flow m³/h
IGBT supply unit (ISU)						
R2i	401	165	193	9	62	35
R3i	466	173	232	12	62	69
R4i	525	240	252	15	62	103
R5i	673	265	276	23	65	250
R7i ¹⁾	963	170	408	38	72 ⁴⁾	800
R8i	1397	245	596	130	74 ⁴⁾	1280
2xR8i	1397	245 ²⁾	596	260	76 ⁴⁾	2560
3xR8i	1397	245 ²⁾	596	390	78 ⁴⁾	3840
4xR8i	1397	245 ²⁾	596	520	78 ⁴⁾	5120
6xR8i	1397	245 ²⁾	596	780	80 ⁴⁾	7680
LCL-filter for IGBT supply unit (ISU)						
RLCL-01-5	850	173	137	15	69	-
RLCL-02-5	850	173	137	15	69	-
RLCL-03-5	850	173	137	20	69	-
RLCL-11-5	920	265	169.5	40	69	-
RLCL-12-5	920	265	169.5	50	69	-
ALCL-0X-X	810	304	292	72	-	480
ALCL-1X-X	1397	240	499	180	-	400
ALCL-2X-X	1397	240	573	305	-	1280

Frame size	Height mm	Width mm	Depth mm	Weight kg	Noise level dB(A)	Air flow m³/h
6-pulse diode supply unit (DSU)						
D3	1480	234	400 ³⁾	130	65	720
D4	1480	234	400 ³⁾	180	65	720
2xD4	1480	234 ²⁾	400 ³⁾	360	67	1440
3xD4	1480	234 ²⁾	400 ³⁾	540	68	2160
4xD4	1480	234 ²⁾	400 ³⁾	720	69	2880
5xD4	1480	234 ²⁾	400 ³⁾	900	70	3600
6-pulse regenerative thyristor supply unit (TSU)						
2xB4	1808	340 ²⁾	430	110 ²⁾	72 ⁵⁾	2000
2xB5	1808	420 ²⁾	430	150 ²⁾	75 ⁵⁾	3400
DC chokes for 6-pulse regenerative supply unit (TSU)						
choke B4	771	348	449	110	-	600
choke B5	991	348	449	150	-	700
12-pulse diode supply unit (DSU)						
D4	1480	234	400 ³⁾	180	65	720
2xD4	1480	234 ²⁾	400 ³⁾	360	67	1440
3xD4	1480	234 ²⁾	400 ³⁾	540	68	2160
4xD4	1480	234 ²⁾	400 ³⁾	720	69	2880
5xD4	1480	234 ²⁾	400 ³⁾	900	70	3600

¹⁾ Dimensions do not include cooling fan.

²⁾ Single module only.

³⁾ Cable connections need additional space (about 200 mm) behind the module.

⁴⁾ Supply modules + filters.

⁵⁾ Supply modules + choke.

Ratings, types and voltages

ACS800-X04, supply module, $U_N = 500\text{ V}$



Nominal ratings				No-overload use	Light-overload use		Heavy-duty use		Heat dissipation	Type designation	Frame size
$I_{cont. max}$ A (AC)	$I_{cont. max}$ A (DC)	I_{max} A (DC)	S_N kVA	$P_{cont. max}$ kW (DC)	I_N A (DC)	P_N kW (DC)	I_{hd} A (DC)	P_{hd} kW (DC)	kW		

$U_N = 500\text{ V}$ (Range 380 to 500 V). The power ratings are valid at nominal voltage 500 V.

IGBT supply module (ISU)											
5.1	6.1	8.9	4.4	4.4	5.9	4.3	4.4	3.1	0.3	ACS800-204-0004-5	R2i + RLCL-01-5
10.8	13.0	18.9	9.3	9.2	12.5	9.2	9.4	6.7	0.6	ACS800-204-0009-5	R2i + RLCL-02-5
27.7	33.6	48.4	24.0	23.8	32.2	23.8	24.2	17.1	0.9	ACS800-204-0021-5	R3i + RLCL-03-5
39.2	47.4	68.7	33.9	33.6	45.5	33.6	34.3	24.3	1.5	ACS800-204-0031-5	R4i + RLCL-11-5
78.3	94.7	137.9	67.8	67.1	91.0	67.1	69.0	48.8	2.4	ACS800-204-0061-5	R5i + RLCL-12-5
180	218	327	156	154	210	148	163	115	4	ACS800-204-0165-5	R7i + ALCL-04-5
220	267	399	191	189	256	181	200	141	4.4	ACS800-204-0195-5	R7i + ALCL-05-5
270	327	475	234	231	314	222	245	173	6.2	ACS800-204-0230-5	R8i + ALCL-12-5
360	436	633	312	309	419	296	327	231	8.4	ACS800-204-0310-5	R8i + ALCL-13-5
450	546	792	390	386	524	370	408	289	10.6	ACS800-204-0390-5	R8i + ALCL-14-5
600	727	1056	520	514	698	494	544	385	14.9	ACS800-204-0520-5	R8i + ALCL-15-5
900	1091	1584	779	772	1048	741	816	577	21.2	ACS800-204-0780-5	2xR8i + ALCL-24-5
1176	1426	2069	1018	1008	1369	968	1067	754	28.9	ACS800-204-1020-5	2xR8i + ALCL-25-5
1746	2117	3072	1512	1497	2032	1437	1584	1120	42.7	ACS800-204-1510-5	3xR8i + 2xALCL-24-5
2304	2794	4054	1995	1975	2682	1896	2090	1478	56.1	ACS800-204-2000-5	4xR8i + 2xALCL-25-5
3420	4147	6017	2962	2932	3981	2815	3102	2193	83	ACS800-204-2960-5	6xR8i + 3xALCL-25-5

6-pulse diode supply unit (DSU)											
286	350	462	247	229	335	219	280	183	1.5	ACS800-304-0320-7	D3
408	500	700	353	327	480	314	400	262	2.4	ACS800-304-0450-7	D3
571	700	924	495	458	670	439	560	367	3.8	ACS800-704-0640-7	D4
816	1000	1400	707	655	960	629	800	524	5	ACS800-704-0910-7	D4
1143	1400	1848	990	917	1340	877	1120	733	7.6	ACS800-704-1370-7	2xD4
1518	1860	2604	1315	1218	1790	1172	1490	976	10	ACS800-704-1810-7	2xD4
2278	2790	3906	1972	1827	2685	1758	2230	1460	15	ACS800-704-2720-7	3xD4
3037	3720	5208	2630	2436	3580	2344	2980	1951	20	ACS800-704-3630-7	4xD4
3796	4650	6510	3287	3045	4475	2930	3720	2436	25	ACS800-704-4540-7	5xD4

6-pulse regenerative thyristor supply unit (TSU)											
981	1202	1947	850	792	1137	749	881	580	6.3	ACS800-404-0850-5	2xB4 + choke
1617	1980	3208	1400	1304	1872	1233	1450	955	10.2	ACS800-404-1400-5	2xB4 + choke
2449	3000	4860	2120	1976	2838	1869	2240	1478	16.5	ACS800-404-2120-5	2xB5 + choke
2858	3500	5670	2475	2305	3310	2180	2618	1724	20.8	ACS800-404-2600-5	2xB5 + choke

12-pulse diode supply unit (DSU)											
571	700	924	495	458	670	439	560	367	3.8	ACS800-704-0640-7	D4
816	1000	1400	707	655	960	629	800	524	5	ACS800-704-0910-7	D4
1143	1400	1848	990	917	1340	877	1120	733	7.6	ACS800-704-1370-7	2xD4
1518	1860	2604	1315	1218	1790	1172	1490	976	10	ACS800-704-1810-7	2xD4
2278	2790	3906	1972	1827	2685	1758	2230	1460	15	ACS800-704-2720-7	3xD4
3037	3720	5208	2630	2436	3580	2344	2980	1951	20	ACS800-704-3630-7	4xD4
3796	4650	6510	3287	3045	4475	2930	3720	2436	25	ACS800-704-4540-7	5xD4

Dimensions

Frame size	Height mm	Width mm	Depth mm	Weight kg	Noise level dB(A)	Air flow m³/h
IGBT supply unit (ISU)						
R2i	401	165	193	9	62	35
R3i	466	173	232	12	62	69
R4i	525	240	252	15	62	103
R5i	673	265	276	23	65	250
R7i ¹⁾	963	170	408	38	72 ⁴⁾	800
R8i	1397	245	596	130	74 ⁴⁾	1280
2xR8i	1397	245 ²⁾	596	260	76 ⁴⁾	2560
3xR8i	1397	245 ²⁾	596	390	78 ⁴⁾	3840
4xR8i	1397	245 ²⁾	596	520	78 ⁴⁾	5120
6xR8i	1397	245 ²⁾	596	780	80 ⁴⁾	7680
LCL-filter for IGBT supply unit (ISU)						
RLCL-01-5	850	173	137	15	69	-
RLCL-02-5	850	173	137	15	69	-
RLCL-03-5	850	173	137	20	69	-
RLCL-11-5	920	265	169.5	40	69	-
RLCL-12-5	920	265	169.5	50	69	-
ALCL-0X-X	810	304	292	72	-	480
ALCL-1X-X	1397	240	499	180	-	400
ALCL-2X-X	1397	240	573	305	-	1280

Frame size	Height mm	Width mm	Depth mm	Weight kg	Noise level dB(A)	Air flow m³/h
6-pulse diode supply unit (DSU)						
D3	1480	234	400 ³⁾	130	65	720
D4	1480	234	400 ³⁾	180	65	720
2xD4	1480	234 ²⁾	400 ³⁾	360	67	1440
3xD4	1480	234 ²⁾	400 ³⁾	540	68	2160
4xD4	1480	234 ²⁾	400 ³⁾	720	69	2880
5xD4	1480	234 ²⁾	400 ³⁾	900	70	3600
6-pulse regenerative thyristor supply unit (TSU)						
2xB4	1808	340 ²⁾	430	110 ²⁾	72 ⁵⁾	2000
2xB5	1808	420 ²⁾	430	150 ²⁾	75 ⁵⁾	3400
DC chokes for 6-pulse regenerative supply unit (TSU)						
choke B4	771	348	449	110	-	600
choke B5	991	348	449	150	-	700
12-pulse diode supply unit (DSU)						
D4	1480	234	400 ³⁾	180	65	720
2xD4	1480	234 ²⁾	400 ³⁾	360	67	1440
3xD4	1480	234 ²⁾	400 ³⁾	540	68	2160
4xD4	1480	234 ²⁾	400 ³⁾	720	69	2880
5xD4	1480	234 ²⁾	400 ³⁾	900	70	3600

¹⁾ Dimensions do not include cooling fan.

²⁾ Single module only.

³⁾ Cable connections need additional space (about 200 mm) behind the module.

⁴⁾ Supply modules + filters.

⁵⁾ Supply modules + choke.

Ratings, types and voltages

ACS800-X04, supply module, $U_N = 690\text{ V}$

ACS800 - X04 - XXXX - 7 + XXXX

Nominal ratings				No-overload use	Light-overload use		Heavy-duty use		Heat dissipation kW	Type designation	Frame size
$I_{\text{cont. max}}$ A (AC)	$I_{\text{cont. max}}$ A (DC)	I_{max} A (DC)	S_N kVA	$P_{\text{cont. max}}$ kW (DC)	I_N A (DC)	P_N kW (DC)	I_{hd} A (DC)	P_{hd} kW (DC)			

$U_N = 690\text{ V}$ (Range 525 to 690 V). The power ratings are valid at nominal voltage 690 V.

IGBT supply module (ISU)

119	144	216	142	141	139	135	108	105	4.6	ACS800-204-0155-7	R7i + ALCL-04-7
135	164	245	161	160	157	153	122	119	5.2	ACS800-204-0175-7	R7i + ALCL-05-7
180	218	327	215	213	210	204	163	159	8.3	ACS800-204-0220-7	R8i + ALCL-12-7
250	303	453	299	296	291	284	227	221	9.4	ACS800-204-0300-7	R8i + ALCL-13-7
300	364	544	359	355	349	341	272	266	13.3	ACS800-204-0360-7	R8i + ALCL-14-7
400	485	726	478	473	466	454	363	354	14.6	ACS800-204-0480-7	R8i + ALCL-15-7
600	727	1088	717	710	698	682	544	531	26.6	ACS800-204-0720-7	2xR8i + ALCL-24-7
784	951	1422	937	928	913	890	711	694	28.5	ACS800-204-0940-7	2xR8i + ALCL-25-7
1164	1411	2111	1391	1377	1355	1322	1056	1030	42.3	ACS800-204-1390-7	3xR8i + 2xALCL-24-5
1536	1862	2786	1836	1817	1788	1745	1393	1359	55.7	ACS800-204-1840-7	4xR8i + 2xALCL-25-7
2280	2764	4136	2725	2698	2654	2590	2068	2018	83	ACS800-204-2730-7	6xR8i + 3xALCL-25-7

6-pulse diode supply unit (DSU)

286	350	462	341	316	335	303	280	253	1.5	ACS800-304-0320-7	D3
408	500	700	488	452	480	434	400	361	2.4	ACS800-304-0450-7	D3
571	700	924	683	632	670	605	560	506	3.8	ACS800-704-0640-7	D4
816	1000	1400	976	904	960	867	800	723	5	ACS800-704-0910-7	D4
1143	1400	1848	1366	1265	1340	1211	1120	1012	7.6	ACS800-704-1370-7	2xD4
1518	1860	2604	1815	1681	1790	1617	1490	1346	10	ACS800-704-1810-7	2xD4
2278	2790	3906	2722	2521	2685	2426	2230	2015	15	ACS800-704-2720-7	3xD4
3037	3720	5208	3629	3361	3580	3235	2980	2693	20	ACS800-704-3630-7	4xD4
3796	4650	6510	4537	4202	4475	4043	3720	3361	25	ACS800-704-4540-7	5xD4

6-pulse regenerative thyristor supply unit (TSU)

711	871	1411	850	784	824	742	637	574	6.3	ACS800-404-0850-7	2xB4 + choke
1171	1435	2325	1400	1292	1353	1219	1050	946	10.2	ACS800-404-1400-7	2xB4 + choke
2176	2664	4316	2600	2399	2519	2269	1993	1795	16.5	ACS800-404-2600-7	2xB5 + choke
2858	3500	5670	3415	3152	3311	2982	2618	2358	20.8	ACS800-404-3600-7	2xB5 + choke

12-pulse diode supply unit (DSU)

571	700	924	683	632	670	605	560	506	3.8	ACS800-704-0640-7	D4
816	1000	1400	976	904	960	867	800	723	5	ACS800-704-0910-7	D4
1143	1400	1848	1366	1265	1340	1211	1120	1012	7.6	ACS800-704-1370-7	2xD4
1518	1860	2604	1815	1681	1790	1617	1490	1346	10	ACS800-704-1810-7	2xD4
2278	2790	3906	2722	2521	2685	2426	2230	2015	15	ACS800-704-2720-7	3xD4
3037	3720	5208	3629	3361	3580	3235	2980	2693	20	ACS800-704-3630-7	4xD4
3796	4650	6510	4537	4202	4475	4043	3720	3361	25	ACS800-704-4540-7	5xD4

Dimensions

Frame size	Height mm	Width mm	Depth mm	Weight kg	Noise level dB(A)	Air flow m³/h
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IGBT supply unit (ISU)

R7i ¹⁾	963	170	408	38	72 ⁴⁾	800
R8i	1397	245	596	130	74 ⁴⁾	1280
2xR8i	1397	245 ²⁾	596	260	76 ⁴⁾	2560
3xR8i	1397	245 ²⁾	596	390	78 ⁴⁾	3840
4xR8i	1397	245 ²⁾	596	520	78 ⁴⁾	5120
6xR8i	1397	245 ²⁾	596	780	80 ⁴⁾	7680

LCL-filter for IGBT supply unit (ISU)

ALCL-0X-X	810	304	292	72	-	480
ALCL-1X-X	1397	240	499	180	-	400
ALCL-2X-X	1397	240	573	305	-	1280

6-pulse diode supply unit (DSU)

D3	1480	234	400 ³⁾	130	65	720
D4	1480	234	400 ³⁾	180	65	720
2XD4	1480	234 ²⁾	400 ³⁾	360	67	1440
3XD4	1480	234 ²⁾	400 ³⁾	540	68	2160
4XD4	1480	234 ²⁾	400 ³⁾	720	69	2880
5XD4	1480	234 ²⁾	400 ³⁾	900	70	3600

¹⁾ Dimensions do not include cooling fan.

²⁾ Single module only.

³⁾ Cable connections need additional space (about 200 mm) behind the module.

⁴⁾ Supply modules + filters.

⁵⁾ Supply modules + choke.

Frame size	Height mm	Width mm	Depth mm	Weight kg	Noise level dB(A)	Air flow m³/h
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6-pulse regenerative thyristor supply unit (TSU)

2XB4	1808	340 ²⁾	430	110 ²⁾	72 ⁵⁾	2000
2XB5	1808	420 ²⁾	430	150 ²⁾	75 ⁵⁾	3400

DC chokes for 6-pulse regenerative supply unit (TSU)

choke B4	771	348	449	110	-	600
choke B5	991	348	449	150	-	700

12-pulse diode supply unit (DSU)

D4	1480	234	400 ³⁾	180	65	720
2XD4	1480	234 ²⁾	400 ³⁾	360	67	1440
3XD4	1480	234 ²⁾	400 ³⁾	540	68	2160
4XD4	1480	234 ²⁾	400 ³⁾	720	69	2880
5XD4	1480	234 ²⁾	400 ³⁾	900	70	3600

Nominal ratings

$I_{\text{cont. max}}$ Rated current available continuously without overloadability at 40 °C.

I_{max} Maximum output current.

S_N Nominal apparent power.

Typical ratings: No-overload use

$P_{\text{cont. max}}$ Power in no-overload use.

Light-overload use

I_N Continuous current allowing 110% I_N for 1 min / 5 min at 40 °C.

P_N Power in light-overload use.

Heavy-duty use

I_{hd} Continuous current allowing 150% I_{hd} for 1 min / 5 min at 40 °C.

P_{hd} Power in heavy-duty use.

The current ratings are the same regardless of the supply voltage within one voltage range.

The ratings apply in 40 °C ambient temperature. In lower temperatures the ratings are higher (except I_{max}).