

Technical and electrical overview

SACE Isomax S circuit-breakers for motor protection (the integrated protection)



		S4		
Rated uninterrupted current, I _u	[A]	160 / 250		
Rated service current, I _n	[A]	100, 160 / 200		
Poles	Nr.	3		
Rated service voltage, U _e (AC) 50-60Hz	[V]	690		
Rated impulse withstand voltage, U _{imp}	[kV]	8		
Rated insulation voltage, U _i	[V]	800		
Test voltage at industrial frequency for 1 min.	[V]	3000		
Rated ultimate short-circuit breaking capacity, I _{cu}		N	H	L
(AC) 50-60 Hz 220/230 V	[kA]	65	100	200
(AC) 50-60 Hz 380/415 V	[kA]	35 (1)	65	100
(AC) 50-60 Hz 440 V	[kA]	30	50	80
(AC) 50-60 Hz 500 V	[kA]	25	40	65
(AC) 50-60 Hz 690 V	[kA]	18	22	30
Rated service short-circuit breaking capacity, I _{cs} (2)	[%I _{cu}]	100%	100%	75%
Rated short-circuit making capacity (415 V)	[kA]	74	143	220
Opening time (415V at I _{cu})	[ms]	8	7	6
Utilisation category (EN 60947-2)		A		
Isolation behaviour		■		
IEC 60947-2, EN 60947-2, IEC 60947-4-1, EN 60947-4-1		■		
PR212/MP (LRIU) microprocessor-based releases		■		
Interchangeability		■		
Versions		F - P - W		
Terminals	fixed	F - EF - ES - FC		
	plug-in	FC CuAl - R - RC		
	withdrawable	EF - FC - R		
		EF - FC - R		
Fixing on DIN rail DIN EN 50023		■		
Mechanical life	[No. operations / hourly operations]	20000/120		
Basic dimensions, fixed 3 poles	L [mm]	105		
	D [mm]	103,5		
	H [mm]	254		
Weights	fixed, 3 poles [kg]	4		
	plug-in, 3 poles [kg]	4,5		
	withdrawable, 3 poles [kg]	4,9		

(1) All the versions with I_{cu}=35kA are certified at 36kA

(2) For S4N/H/L, S5N/H, and S6N/H circuit-breakers the percentage performance of I_{cs} at 500V and 690V is reduced by 25%

KEY TO VERSIONS
F = Fixed
P = Plug-in
W = Withdrawable

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SACE Isomax S circuit-breakers for motor protection (the integrated protection)



	S4X	S5	S6	S6X	S7
	250	400	630	400 / 630	1250
	100, 160, 200	320	630	320, 400 / 630	1000
	3	3	3	3	3
	690	690	690	690	690
	8	8	8	8	8
	800	800	800	800	800
	3000	3000	3000	3000	3000
	X	N H L	N H L	X	S H
	300	65 100 200	65 100 200	300	85 100
	200	35(1) 65 100	35(1) 65 100	200	50 65
	180	30 50 80	30 50 80	180	40 55
	150	25 40 65	25 40 65	150	35 45
	75	20 25 30	20 25 30	75	20 25
	100%	100% 100% 75%	100% 100% 75%	100%	100% 75%
	440	74 143 220	74 143 220	440	105 143
	3,5	8 7 6	9 8 7	3,5	22 22
	A	B	B	A	B
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	■	■	■	■	■
	F - P - W	F - P - W	F - W	F - W	F - W
	F - EF - ES - FC FC CuAl - R - RC	F - EF - ES - FC FC CuAl - R - RC	F - EF - ES FC CuAl - R - RC	F - EF FC CuAl - R - RC	F - EF - ES FC CuAl - HR - V
	EF - R	EF - FC - R	-	-	-
	EF - R	EF - FC - R	EF - HR - VR	EF - VR - HR	EF - VR - HR
	■	■	-	-	-
	20000/120	20000/120	20000/120	20000/120	10000/120
	105	140	210	210	210
	103,5	103,5	103,5	103,5	138,5
	339	254	268	406	406
	5	5	9,5	15	17
	8,2	6,1	-	-	-
	9	6,4	12,1	25,4	21,8

KEY TO TERMINALS
 F = Front
 EF = Extended front
 ES = Extended spreaded front

FC = Front for copper cables
 FC CuAl = Front for copper or aluminium cables

R = Rear threaded
 RC = Rear for copper or aluminium cables
 HR = Rear horizontal flat bar
 VR = Rear vertical flat bar

Technical and electrical overview

SACE Isomax S circuit-breakers for applications up to 1000V

Range at 1000 V in a.c.



		S3	S3X	S4
Rated uninterrupted current, I_u	[A]	160	125	160-250
Poles	Nr.	3	3	3
Rated service voltage, U_e (AC) 50-60Hz	[V]	1000	1000	1000
Rated impulse withstand voltage, U_{imp}	[kV]	8	8	8
Rated insulation voltage, U_i	[V]	1000	1000	1000
Test voltage at industrial frequency for 1 min.		3000	3000	3000
Rated ultimate short-circuit breaking capacity, I_{cu} (AC) 50-60 Hz 1000 V	[kA]	L	X	L
Rated short-circuit making capacity	[kA]	6	30	8
Opening time	[ms]	9,2	63	13,6
Rated short-time withstand current for 1 s, I_{cw}	[kA]	20	10	30
Utilisation category (EN 60947-2)		A	A	A
Isolation behaviour		■	■	■
IEC 60947-2, EN 60947-2		■	■	■
Thermomagnetic releases T adjustable, M fixed 10 lth		■	■	
PR211/P (LI only) microprocessor-based releases				■
PR212/P (LSI-LSIG) microprocessor-based releases				■
Versions		F	F	F
Terminals		F	F	F
Fixing on DIN rail		DIN EN 50023	DIN EN 50023	DIN EN 50023
Mechanical life [No. operations / hourly operations]		25000/120	25000/120	20000/120
Dimensions	L [mm]	105	105	105
	D [mm]	103,5	103,5	103,5
	H [mm]	170	255	254
Weights	[kg]	2,6	3,6	4

Range at 1000 V in d.c.



		S3	S5	S6	S6
Rated uninterrupted current, I_u	[A]	160-250	400	630	800
Poles	Nr.	4	4	4	4
Rated service voltage, U_e	[V -]	1000	1000	1000	1000
Rated impulse withstand voltage, U_{imp}	[kV]	8	8	8	8
Rated insulation voltage, U_i	[V]	1000	1000	1000	1000
Test voltage at industrial frequency for 1 min.		3000	3000	3000	3000
Ultimate rated short-circuit breaking capacity, I_{cu} (4 poles in series)	[kA]	L	L	L	L
Rated short-circuit making capacity	[kA]	40	40	40	50
Opening time	[ms]	40	40	40	50
Rated short-time withstand current for 1 s, I_{cw}	[kA]	25	35	45	50
Utilisation category (EN 60947-2)		-	5	7,6	10
Isolation behaviour		A	B	B	B
IEC 60947-2, EN 60947-2		■	■	■	■
Thermomagnetic releases, T adjustable - M fixed 10 lth		■	■	■	■
Thermomagnetic releases, T adjustable - M adjustable		-	-	-	-
Versions		F	F	F	F
Terminals		F	F	F	F
Fixing on DIN rail		DIN EN 50023	DIN EN 50023	-	-
Mechanical life [No. operations / hourly operations]		25000/120	20000/120	20000/120	20000/120
Basic dimensions, fixed	L [mm]	140	184	280	280
	D [mm]	103,5	103,5	103,5	103,5
	H [mm]	170	254	268	268
Weights, fixed	[kg]	3,5	7	12	12

Technical and electrical overview

SACE Isomax S circuit-breakers for applications up to 1000V

	S4X	S5	S6	S6X
	250	400	630-800	630
	3	3	3	3
	1000	1000	1000	1000
	8	8	8	8
	1000	1000	1000	1000
	3000	3000	3000	3000
	X	L	L	X
	30	8	12	30
	63	13,6	24	63
	20	30	30	25
		5	7,6 (630A)-10 (800A)	
	A	B	B	A
	■	■	■	■
	■	■	■	■
	■	■	■	■
	■	■	■	■
	F	F	F	F
	F	F	F	F
	DIN EN 50023	DIN EN 50023	—	—
	20000/120	20000/120	20000/120	20000/120
	105	140	210	210
	103,5	103,5	103,5	103,5
	254	254	268	406
	4	5	9,5	15

Circuit-breakers with electronic release for alternating current

	In100	In250	In400	In630	In800
S4L 160	■	—	—	—	—
S4L 250	—	■	—	—	—
S4X 250	—	■	—	—	—
S5L 400	—	—	■	—	—
S6L 630	—	—	—	■	—
S6X 630	—	—	—	■	—
S6L 800	—	—	—	—	■
Im = 1,5 ... 12 x In [A]	150...1200	375...3000	600 ... 4800	945...7560	1200...9600

Circuit-breakers with thermomagnetic release for alternating current

(thermal threshold adjustable from 0.7 to 1 x In; fixed magnetic threshold)

	R32	R50	R80	R100	R125	R160	R200	R250
S3L 160	■	■	■	■	■	■	—	—
S3X 125	■	■	■	■	■	—	—	—
Im AC (10xIn) [A]	500	500	800	1000	1250	1600	2000	2500

Circuit-breakers with thermomagnetic release for direct current

	R32 (1)	R50 (1)	R80 (1)	R100 (1)	R125 (1)	R160 (1)	R200 (1)	R250 (1)	R400 (2)	R630 (2)	R800 (2)
S3L 160	■	■	■	■	■	■	—	—	—	—	—
S3L 250	—	—	—	—	—	—	■	■	—	—	—
S5L 400	—	—	—	—	—	—	—	—	■	—	—
S6L 630	—	—	—	—	—	—	—	—	—	■	—
S6L 800	—	—	—	—	—	—	—	—	—	—	■
Im DC (10xIn) [A]	500	500	800	1000	1250	1600	2000	2500	—	—	—
Im DC (5-10xIn) [A]									2000-4000	3150-6300	4000-8000

(1) Thermal threshold adjustable from 0.7 and 1 x In; fixed magnetic threshold

(2) Thermal threshold adjustable from 0.7 and 1 x In; magnetic threshold adjustable between 5 and 10 x In.

Technical and electrical overview

SACE Isomax S switch-disconnectors



	S2D	S3D	S6D	S7D	S8D
Conventional thermal current at 60 °C, I_{th} [A]	125 / 160	125 / 160 250 / 320	400 630 / 800	1000 1250 / 1600	2000 2500 / 3200
Number of poles	3/4	3/4	3/4	3/4	3/4
Rated service voltage, U_e (a.c.) 50-60 Hz [V~]	690	690	690	690	690
(d.c.) [V-]	500	750	750	750	750
Rated current, I_u [A]	125-160	100-160-250-320	400-630-800	1000-1250-1600	2000-2500-3200
Rated impulse withstand current, U_{imp} [kV]	6	8	8	8	8
Rated insulation voltage, U_i [V]	690	800	800	800	800
Test voltage at industrial frequency for 1 minute [V]	3000	3000	3000	3000	3000
Rated short-circuit making capacity (415 V-), I_{cm} [kA]	3,1	10	30	52,5	85
Rated short-time withstand current for 1s, I_{cw} [kA]	2,2	6,5	15	25	40
Isolation behaviour	■	■	■	■	■
IEC 947-3	■	■	■	■	■
Terminals	fixed EF - FC - FC CuAl R - RC plug-in FC - R withdrawable -	F - EF - FC FC CuAl - R - RC	F - EF - FC CuAl R - RC	F - EF - FC - CuAl (1250A) - HR - VR	EF (2500A)-R
Mechanical life [No. operations /operations per hour]	25000/240	25000/120	20000/120	10000/120	10000/20
Dimensions, fixed L (3/4 poles) [mm]	90/120	105/140	210/280	210/280	406/556
P [mm]	70	103,5	103,5	138,5	242
H [mm]	120	170	268	406	400
Weights, fixed 3/4 poles [kg]	1,1/1,5	2,6/3,5	9,5/12	17/22	57/76

Coordination with the circuit-breakers (kA at 380-415 V AC)

Type	S2D125	S2D160	S3D100	S3D160	S3D250	S3D320	S6D400	S6D630	S6D800	S7D1000	S7D1250	S7D1600	S8D2000	S8D2500	S8D3200
S1B	16		16												
S1N	25		25												
S2B	16	16	16	16											
S2N	35	35	35	35											
S2S	50	50	50	50											
S3N			35	35	35	35									
S3H			65	65	65	65									
S5N							35	35	35						
S5H							35	35	35						
S6N							35	35	35						
S6S							50	50	50						
S6H							65	65	65						
S7S										50	50	50			
S7H										65	65	65			
S8H													85	85	85
S8V													120	120	120

Order codes

SACE Isomax S1 circuit-breaker

F = FIXED



S1B 125 $I_u (40\text{ }^\circ\text{C}) = 125\text{ A}$ $I_{cu} (415\text{ V}) = 16\text{ kA}$

Thermomagnetic release		Im=5 lth		code 1SDA0 R1		Im=10 lth		code 1SDA0 R1	
				3 poles	4 poles			3 poles	4 poles
<i>FC Cu = Front terminals for copper cables</i>									
S1B 125 F FC Cu	R 10	160A	23645	24245	500A	00002		00052	
S1B 125 F FC Cu	R 12.5	160A	23647	24247	500A	00004		00054	
S1B 125 F FC Cu	R 16	160A	23649	24249	500A	00006		00056	
S1B 125 F FC Cu	R 20	200A	23651	24251	500A	00008		00058	
S1B 125 F FC Cu	R 25	200A	23653	24253	500A	00010		00060	
S1B 125 F FC Cu	R 32	200A	23655	24255	500A	00012		00062	
S1B 125 F FC Cu	R 40	200A	23657	24257	500A	00014		00064	
S1B 125 F FC Cu	R 50	250A	23659	24259	500A	00016		00066	
S1B 125 F FC Cu	R 63	320A	23661	24261	630A	00018		00068	
S1B 125 F FC Cu	R 80	400A	23663	24263	800A	00020		00070	
S1B 125 F FC Cu	R 100	500A	23665	24265	1000A	00022		00072	
S1B 125 F FC Cu	R 125	630A	23667	24267	1250A	00024		00074	
<i>R = Terminali posteriori filettati</i>									
S1B 125 F R	R 10	160A	23765	23885	500A	00027		00077	
S1B 125 F R	R 12.5	160A	23767	23887	500A	00029		00079	
S1B 125 F R	R 16	160A	23769	23889	500A	00031		00081	
S1B 125 F R	R 20	200A	23771	23891	500A	00033		00083	
S1B 125 F R	R 25	200A	23773	23893	500A	00035		00085	
S1B 125 F R	R 32	200A	23775	23895	500A	00037		00087	
S1B 125 F R	R 40	200A	23777	23897	500A	00039		00089	
S1B 125 F R	R 50	250A	23779	23899	500A	00041		00091	
S1B 125 F R	R 63	320A	23781	23901	630A	00043		00093	
S1B 125 F R	R 80	400A	23783	23903	800A	00045		00095	
S1B 125 F R	R 100	500A	23785	23905	1000A	00047		00097	
S1B 125 F R	R 125	630A	23787	23907	1250A	00049		00099	

Order codes

SACE Isomax S1 circuit-breaker

F = FIXED



S1N 125 $I_u(40\text{ }^\circ\text{C}) = 125\text{ A}$ $I_{cu}(415\text{ V}) = 25\text{ kA}$

Thermomagnetic release		$I_m = 5\text{ lth}$		code 1SDA0 R1		$I_m = 10\text{ lth}$		code 1SDA0 R1	
				3 poles	4 poles			3 poles	4 poles
<i>FC Cu = Front terminals for copper cables</i>									
S1N 125 F FC Cu	R 10	160A	23669	24269	500A	00152	00202		
S1N 125 F FC Cu	R 12.5	160A	23671	24271	500A	00154	00204		
S1N 125 F FC Cu	R 16	160A	23673	24273	500A	00156	00206		
S1N 125 F FC Cu	R 20	200A	23675	24275	500A	00158	00208		
S1N 125 F FC Cu	R 25	200A	23677	24277	500A	00160	00210		
S1N 125 F FC Cu	R 32	200A	23679	24279	500A	00162	00212		
S1N 125 F FC Cu	R 40	200A	23681	24281	500A	00164	00214		
S1N 125 F FC Cu	R 50	250A	23683	24283	500A	00166	00216		
S1N 125 F FC Cu	R 63	320A	23685	24285	630A	00168	00218		
S1N 125 F FC Cu	R 80	400A	23687	24287	800A	00170	00220		
S1N 125 F FC Cu	R 100	500A	23689	24289	1000A	00172	00222		
S1N 125 F FC Cu	R 125	630A	23691	24291	1250A	00174	00224		
<i>R = Threaded rear terminals</i>									
S1N 125 F R	R 10	160A	23789	23909	500A	00177	00227		
S1N 125 F R	R 12.5	160A	23791	23911	500A	00179	00229		
S1N 125 F R	R 16	160A	23793	23913	500A	00181	00231		
S1N 125 F R	R 20	200A	23795	23915	500A	00183	00233		
S1N 125 F R	R 25	200A	23797	23917	500A	00185	00235		
S1N 125 F R	R 32	200A	23799	23919	500A	00187	00237		
S1N 125 F R	R 40	200A	23801	23921	500A	00189	00239		
S1N 125 F R	R 50	250A	23803	23923	500A	00191	00241		
S1N 125 F R	R 63	320A	23805	23925	630A	00193	00243		
S1N 125 F R	R 80	400A	23807	23927	800A	00195	00245		
S1N 125 F R	R 100	500A	23809	23929	1000A	00197	00247		
S1N 125 F R	R 125	630A	23811	23931	1250A	00199	00249		

Magnetic release		$I_m = 5\text{ lth}$		code 1SDA0 R1		$I_m = 10\text{ lth}$		code 1SDA0 R1	
				3 poles	4 poles			3 poles	4 poles
<i>FC Cu = Front terminals for copper cables</i>									
S1N 125 F FC Cu	In 16A	160A	33676	33772					
S1N 125 F FC Cu	In 40A	200A	33684	33780					
S1N 125 F FC Cu	In 50A	250A	33686	33782	500A	33662	33758		
S1N 125 F FC Cu	In 63A	320A	33688	33784	630A	33664	33760		
S1N 125 F FC Cu	In 80A	400A	33690	33786	800A	33666	33762		
S1N 125 F FC Cu	In 100A				1000A	33668	33764		
S1N 125 F FC Cu	In 125A				1250A	33670	33766		
<i>R = Threaded rear terminals</i>									
S1N 125 F R	In 16A	160A	33724	33820					
S1N 125 F R	In 40A	200A	33732	33828					
S1N 125 F R	In 50A	250A	33734	33830	500A	33710	33806		
S1N 125 F R	In 63A	320A	33736	33832	630A	33712	33808		
S1N 125 F R	In 80A	400A	33738	33834	800A	33714	33810		
S1N 125 F R	In 100A				1000A	33716	33812		
S1N 125 F R	In 125A				1250A	33718	33814		

S1N 125 Curva D $I_u(40\text{ }^\circ\text{C}) = 125\text{ A}$ $I_{cu}(415\text{ V}) = 25\text{ kA}$

Thermomagnetic release		$I_m = 10\text{ lth}$		code 1SDA0 R1	
				4 poles	
<i>FC Cu = Front terminals for copper cables</i>					
S1N 125 F FC Cu	R 63A			1250A	45084
S1N 125 F FC Cu	R 80A			1250A	45087
S1N 125 F FC Cu	R 100A			1400A	45089
S1N 125 F FC Cu	R 125A			1500A	45091
<i>R = Threaded rear terminals</i>					
S1N 125 F R	R 63A			1250A	45093
S1N 125 F R	R 80A			1250A	45095
S1N 125 F R	R 100A			1400A	45097
S1N 125 F R	R 125A			1500A	45099

Order codes

SACE Isomax S1 circuit-breaker

P = PLUG-IN



Moving part

S1B 125 $I_u (40\text{ }^\circ\text{C}) = 125\text{ A}$ $I_{cu} (415\text{ V}) = 16\text{ kA}$

Thermomagnetic release		Im=5 Ith		Im=10 Ith	
		code 1SDA0 R1 3 poles	4 poles	code 1SDA0 R1 3 poles	4 poles
S1B 125 P MP	R 10	160A	24005	24125	500A 00102 00127
S1B 125 P MP	R 12.5	160A	24007	24127	500A 00104 00129
S1B 125 P MP	R 16	160A	24009	24129	500A 00106 00131
S1B 125 P MP	R 20	200A	24011	24131	500A 00108 00133
S1B 125 P MP	R 25	200A	24013	24133	500A 00110 00135
S1B 125 P MP	R 32	200A	24015	24135	500A 00112 00137
S1B 125 P MP	R 40	200A	24017	24137	500A 00114 00139
S1B 125 P MP	R 50	250A	24019	24139	500A 00116 00141
S1B 125 P MP	R 63	320A	24021	24141	630A 00118 00143
S1B 125 P MP	R 80	400A	24023	24143	800A 00120 00145
S1B 125 P MP	R 100	500A	24025	24145	1000A 00122 00147
S1B 125 P MP	R 125	630A	24027	24147	1250A 00124 00149

S1B 125 $I_u (40\text{ }^\circ\text{C}) = 125\text{ A}$ $I_{cu} (415\text{ V}) = 25\text{ kA}$

Thermomagnetic release		Im=5 Ith		Im=10 Ith	
		code 1SDA0 R1 3 poles	4 poles	code 1SDA0 R1 3 poles	4 poles
S1N 125 P MP	R 10	160A	24029	24149	500A 00252 00277
S1N 125 P MP	R 12.5	160A	24031	24151	500A 00254 00279
S1N 125 P MP	R 16	160A	24033	24153	500A 00256 00281
S1N 125 P MP	R 20	200A	24035	24155	500A 00258 00283
S1N 125 P MP	R 25	200A	24037	24157	500A 00260 00285
S1N 125 P MP	R 32	200A	24039	24159	500A 00262 00287
S1N 125 P MP	R 40	200A	24041	24161	500A 00264 00289
S1N 125 P MP	R 50	250A	24043	24163	500A 00266 00291
S1N 125 P MP	R 63	320A	24045	24165	630A 00268 00293
S1N 125 P MP	R 80	400A	24047	24167	800A 00270 00295
S1N 125 P MP	R 100	500A	24049	24169	1000A 00272 00297
S1N 125 P MP	R 125	630A	24051	24171	1250A 00274 00299

Magnetic release		Im=5 Ith		Im=10 Ith	
		code 1SDA0 R1 3 poles	4 poles	code 1SDA0 R1 3 poles	4 poles
S1N 125 P MP	In 16A	160A	33964	34012	
S1N 125 P MP	In 40A	200A	33972	34020	
S1N 125 P MP	In 50A	250A	33974	34022	500A 33950 33998
S1N 125 P MP	In 63A	320A	33976	34024	630A 33952 34000
S1N 125 P MP	In 80A	400A	33978	34026	800A 33954 34002
S1N 125 P MP	In 100A				1000A 33956 34004
S1N 125 P MP	In 125A				1250A 33958 34006

S1N 125 Curva D $I_u (40\text{ }^\circ\text{C}) = 125\text{ A}$ $I_{cu} (415\text{ V}) = 25\text{ kA}$

Thermomagnetic release		Im=10 Ith	code 1SDA0 R1 4 poles
<i>FC Cu = Front terminals for copper cables</i>			
S1N 125 P MP	R 63A		1250A 45101
S1N 125 P MP	R 80A		1250A 45103
S1N 125 P MP	R 100A		1400A 45105
S1N 125 P MP	R 125A		1500A 45107

Order codes

SACE Isomax S2 circuit-breaker

F = FIXED



S2B 160 $I_u (40\text{ }^\circ\text{C}) = 160\text{ A}$ $I_{cu} (415\text{ V}) = 16\text{ kA}$

Thermomagnetic release			$I_m = 5\text{ lth}$		$I_m = 10\text{ lth}$		
			code 1SDA0 R1 3 poles	4 poles	code 1SDA0 R1 3 poles	4 poles	
EF = Extended front terminals							
S2B 160 F EF	R 12.5	160A	34056	34440	500A	34032	34416
S2B 160 F EF	R 16	160A	34058	34442	500A	34034	34418
S2B 160 F EF	R 20	200A	34060	34444	500A	34036	34420
S2B 160 F EF	R 25	200A	34062	34446	500A	34038	34422
S2B 160 F EF	R 32	200A	34064	34448	500A	34040	34424
S2B 160 F EF	R 40	200A	34066	34450	500A	34042	34426
S2B 160 F EF	R 50	250A	34068	34452	500A	34044	34428
S2B 160 F EF	R 63	320A	34070	34454	630A	34046	34430
S2B 160 F EF	R 80	400A	34072	34456	800A	34048	34432
S2B 160 F EF	R 100	500A	34074	34458	1000A	34050	34434
S2B 160 F EF	R 125	630A	34076	34460	1250A	34052	34436
S2B 160 F EF	R 160	800A	34078	34462	1600A	34054	34438
FC Cu = Front terminals for copper cables							
S2B 160 F FC Cu	R 12.5	160A	23693	24293	500A	00302	00352
S2B 160 F FC Cu	R 16	160A	23695	24295	500A	00304	00354
S2B 160 F FC Cu	R 20	200A	23697	24297	500A	00306	00356
S2B 160 F FC Cu	R 25	200A	23699	24299	500A	00308	00358
S2B 160 F FC Cu	R 32	200A	23701	24301	500A	00310	00360
S2B 160 F FC Cu	R 40	200A	23703	24303	500A	00312	00362
S2B 160 F FC Cu	R 50	250A	23705	24305	500A	00314	00364
S2B 160 F FC Cu	R 63	320A	23707	24307	630A	00316	00366
S2B 160 F FC Cu	R 80	400A	23709	24309	800A	00318	00368
S2B 160 F FC Cu	R 100	500A	23711	24311	1000A	00320	00370
S2B 160 F FC Cu	R 125	630A	23713	24313	1250A	00322	00372
S2B 160 F FC Cu	R 160	800A	23715	24315	1600A	00324	00374
FC CuAl = Front terminals for copper/aluminium cables							
S2B 160 F FC CuAl*	R 12.5	160A	34200	34584	500A	34176	34560
S2B 160 F FC CuAl*	R 16	160A	34202	34586	500A	34178	34562
S2B 160 F FC CuAl*	R 20	200A	34204	34588	500A	34180	34564
S2B 160 F FC CuAl*	R 25	200A	34206	34590	500A	34182	34566
S2B 160 F FC CuAl*	R 32	200A	34208	34592	500A	34184	34568
S2B 160 F FC CuAl*	R 40	200A	34210	34594	500A	34186	34570
S2B 160 F FC CuAl*	R 50	250A	34212	34596	500A	34188	34572
S2B 160 F FC CuAl*	R 63	320A	34214	34598	630A	34190	34574
S2B 160 F FC CuAl*	R 80	400A	34216	34600	800A	34192	34576
S2B 160 F FC CuAl*	R 100	500A	34218	34602	1000A	34194	34578
S2B 160 F FC CuAl*	R 125	630A	34220	34604	1250A	34196	34580
S2B 160 F FC CuAl*	R 160	800A	34222	34606	1600A	34198	34582
S2B 160 F FC CuAl**	R 12.5	160A	34296	34680	500A	34272	34656
S2B 160 F FC CuAl**	R 16	160A	34298	34682	500A	34274	34658
S2B 160 F FC CuAl**	R 20	200A	34300	34684	500A	34276	34660
S2B 160 F FC CuAl**	R 25	200A	34302	34686	500A	34278	34662
S2B 160 F FC CuAl**	R 32	200A	34304	34688	500A	34280	34664
S2B 160 F FC CuAl**	R 40	200A	34306	34690	500A	34282	34666
S2B 160 F FC CuAl**	R 50	250A	34308	34692	500A	34284	34668
S2B 160 F FC CuAl**	R 63	320A	34310	34694	630A	34286	34670
S2B 160 F FC CuAl**	R 80	400A	34312	34696	800A	34288	34672
S2B 160 F FC CuAl**	R 100	500A	34314	34698	1000A	34290	34674
S2B 160 F FC CuAl**	R 125	630A	34316	34700	1250A	34292	34676
S2B 160 F FC CuAl**	R 160	800A	34318	34702	1600A	34294	34678
R = Threaded rear terminals							
S2B 160 F R	R 12.5	160A	23813	23933	500A	00327	00377
S2B 160 F R	R 16	160A	23815	23935	500A	00329	00379
S2B 160 F R	R 20	200A	23817	23937	500A	00331	00381
S2B 160 F R	R 25	200A	23819	23939	500A	00333	00383
S2B 160 F R	R 32	200A	23821	23941	500A	00335	00385
S2B 160 F R	R 40	200A	23823	23943	500A	00337	00387
S2B 160 F R	R 50	250A	23825	23945	500A	00339	00389
S2B 160 F R	R 63	320A	23827	23947	630A	00341	00391
S2B 160 F R	R 80	400A	23829	23949	800A	00343	00393
S2B 160 F R	R 100	500A	23831	23951	1000A	00345	00395
S2B 160 F R	R 125	630A	23833	23953	1250A	00347	00397
S2B 160 F R	R 160	800A	23835	23955	1600A	00349	00399

* Cable section = 1 x 2.5...50 mm²
 ** Cable section = 1 x 35...95 mm²

Order codes

SACE Isomax S2 circuit-breaker

F = FIXED


P2539004

S2N 160 $I_n (40\text{ }^\circ\text{C}) = 160\text{ A}$ $I_{cu} (415\text{ V}) = 35\text{ kA}$

Thermomagnetic release		$I_m = 5\text{ Ith}$		code 1SDA0 R1		$I_m = 10\text{ Ith}$		code 1SDA0 R1	
				3 poles	4 poles			3 poles	4 poles
EF = Extended front terminals									
S2N 160 F EF	R 12.5	160A	34826	35210	500A	34802	35186		
S2N 160 F EF	R 16	160A	34828	35212	500A	34804	35188		
S2N 160 F EF	R 20	200A	34830	35214	500A	34806	35190		
S2N 160 F EF	R 25	200A	34832	35216	500A	34808	35192		
S2N 160 F EF	R 32	200A	34834	35218	500A	34810	35194		
S2N 160 F EF	R 40	200A	34836	35220	500A	34812	35196		
S2N 160 F EF	R 50	250A	34838	35222	500A	34814	35198		
S2N 160 F EF	R 63	320A	34840	35224	630A	34816	35200		
S2N 160 F EF	R 80	400A	34842	35226	800A	34818	35202		
S2N 160 F EF	R 100	500A	34844	35228	1000A	34820	35204		
S2N 160 F EF	R 125	630A	34846	35230	1250A	34822	35206		
S2N 160 F EF	R 160	800A	34848	35232	1600A	34824	35208		
FC Cu = Front terminals for copper cables									
S2N 160 F FC Cu	R 12.5	160A	23717	24317	500A	00452	00502		
S2N 160 F FC Cu	R 16	160A	23719	24319	500A	00454	00504		
S2N 160 F FC Cu	R 20	200A	23721	24321	500A	00456	00506		
S2N 160 F FC Cu	R 25	200A	23723	24323	500A	00458	00508		
S2N 160 F FC Cu	R 32	200A	23725	24325	500A	00460	00510		
S2N 160 F FC Cu	R 40	200A	23727	24327	500A	00462	00512		
S2N 160 F FC Cu	R 50	250A	23729	24329	500A	00464	00514		
S2N 160 F FC Cu	R 63	320A	23731	24331	630A	00466	00516		
S2N 160 F FC Cu	R 80	400A	23733	24333	800A	00468	00518		
S2N 160 F FC Cu	R 100	500A	23735	24335	1000A	00470	00520		
S2N 160 F FC Cu	R 125	630A	23737	24337	1250A	00472	00522		
S2N 160 F FC Cu	R 160	800A	23739	24339	1600A	00474	00524		
FC CuAl = Front terminals for copper/aluminium cables									
S2N 160 F FC CuAl*	R 12.5	160A	34970	35354	500A	34946	35330		
S2N 160 F FC CuAl*	R 16	160A	34972	35356	500A	34948	35332		
S2N 160 F FC CuAl*	R 20	200A	34974	35358	500A	34950	35334		
S2N 160 F FC CuAl*	R 25	200A	34976	35360	500A	34952	35336		
S2N 160 F FC CuAl*	R 32	200A	34978	35362	500A	34954	35338		
S2N 160 F FC CuAl*	R 40	200A	34980	35364	500A	34956	35340		
S2N 160 F FC CuAl*	R 50	250A	34982	35366	500A	34958	35342		
S2N 160 F FC CuAl*	R 63	320A	34984	35368	630A	34960	35344		
S2N 160 F FC CuAl*	R 80	400A	34986	35370	800A	34962	35346		
S2N 160 F FC CuAl*	R 100	500A	34988	35372	1000A	34964	35348		
S2N 160 F FC CuAl*	R 125	630A	34990	35374	1250A	34966	35350		
S2N 160 F FC CuAl*	R 160	800A	34992	35376	1600A	34968	35352		
S2N 160 F FC CuAl**	R 12.5	160A	35066	35450	500A	35042	35426		
S2N 160 F FC CuAl**	R 16	160A	35068	35452	500A	35044	35428		
S2N 160 F FC CuAl**	R 20	200A	35070	35454	500A	35046	35430		
S2N 160 F FC CuAl**	R 25	200A	35072	35456	500A	35048	35432		
S2N 160 F FC CuAl**	R 32	200A	35074	35458	500A	35050	35434		
S2N 160 F FC CuAl**	R 40	200A	35076	35460	500A	35052	35436		
S2N 160 F FC CuAl**	R 50	250A	35078	35462	500A	35054	35438		
S2N 160 F FC CuAl**	R 63	320A	35080	35464	630A	35056	35440		
S2N 160 F FC CuAl**	R 80	400A	35082	35466	800A	35058	35442		
S2N 160 F FC CuAl**	R 100	500A	35084	35468	1000A	35060	35444		
S2N 160 F FC CuAl**	R 125	630A	35086	35470	1250A	35062	35446		
S2N 160 F FC CuAl**	R 160	800A	35088	35472	1600A	35064	35448		
R = Threaded rear terminals									
S2N 160 F R	R 12.5	160A	23837	23957	500A	00477	00527		
S2N 160 F R	R 16	160A	23839	23959	500A	00479	00529		
S2N 160 F R	R 20	200A	23841	23961	500A	00481	00531		
S2N 160 F R	R 25	200A	23843	23963	500A	00483	00533		
S2N 160 F R	R 32	200A	23845	23965	500A	00485	00535		
S2N 160 F R	R 40	200A	23847	23967	500A	00487	00537		
S2N 160 F R	R 50	250A	23849	23969	500A	00489	00539		
S2N 160 F R	R 63	320A	23851	23971	630A	00491	00541		
S2N 160 F R	R 80	400A	23853	23973	800A	00493	00543		
S2N 160 F R	R 100	500A	23855	23975	1000A	00495	00545		
S2N 160 F R	R 125	630A	23857	23977	1250A	00497	00547		
S2N 160 F R	R 160	800A	23859	23979	1600A	00499	00549		

* Cable section = 1 x 2.5...50 mm²
 ** Cable section = 1 x 35...95 mm²

Order codes

SACE Isomax S2 circuit-breaker

F = FIXED



			Im = 5 lth		Im = 10 lth			
			code 1SDA0 R1		code 1SDA0 R1			
Thermomagnetic release			3 poles	4 poles	3 poles	4 poles	3 poles	4 poles
EF = Extended front terminals								
S2N 160 F EF	In 16A	160A	34876	35260				
S2N 160 F EF	In 40A	200A	34884	35268				
S2N 160 F EF	In 50A	250A	34886	35270	500A	34862	35246	
S2N 160 F EF	In 63A	320A	34888	35272	630A	34864	35248	
S2N 160 F EF	In 80A	400A	34890	35274	800A	34866	35250	
S2N 160 F EF	In 100A				1000A	34868	35252	
S2N 160 F EF	In 125A				1250A	34870	35254	
S2N 160 F EF	In 160A				1600A	34872	35256	
FC Cu = Front terminals for copper cables								
S2N 160 F FC Cu	In 16A	160A	34924	35308				
S2N 160 F FC Cu	In 40A	200A	34932	35316				
S2N 160 F FC Cu	In 50A	250A	34934	35318	500A	34910	35294	
S2N 160 F FC Cu	In 63A	320A	34936	35320	630A	34912	35296	
S2N 160 F FC Cu	In 80A	400A	34938	35322	800A	34914	35298	
S2N 160 F FC Cu	In 100A				1000A	34916	35300	
S2N 160 F FC Cu	In 125A				1250A	34918	35302	
S2N 160 F FC Cu	In 160A				1600A	34920	35304	
FC CuAl = Front terminals for copper/aluminium cables								
S2N 160 F FC CuAl*	In 16A	160A	35020	35404				
S2N 160 F FC CuAl*	In 40A	200A	35028	35412				
S2N 160 F FC CuAl*	In 50A	250A	35030	35414	500A	35006	35390	
S2N 160 F FC CuAl*	In 63A	320A	35032	35416	630A	35008	35392	
S2N 160 F FC CuAl*	In 80A	400A	35034	35418	800A	35010	35394	
S2N 160 F FC CuAl*	In 100A				1000A	35012	35396	
S2N 160 F FC CuAl*	In 125A				1250A	35014	35398	
S2N 160 F FC CuAl*	In 160A				1600A	35016	35400	
S2N 160 F FC CuAl**	In 16A	160A	35116	35500				
S2N 160 F FC CuAl**	In 40A	200A	35124	35508				
S2N 160 F FC CuAl**	In 50A	250A	35126	35510	500A	35102	35486	
S2N 160 F FC CuAl**	In 63A	320A	35128	35512	630A	35104	35488	
S2N 160 F FC CuAl**	In 80A	400A	35130	35514	800A	35106	35490	
S2N 160 F FC CuAl**	In 100A				1000A	35108	35492	
S2N 160 F FC CuAl**	In 125A				1250A	35110	35494	
S2N 160 F FC CuAl**	In 160A				1600A	35112	35496	
R = Threaded rear terminals								
S2N 160 F R	In 16A	160A	35164	35548				
S2N 160 F R	In 40A	200A	35172	35556				
S2N 160 F R	In 50A	250A	35174	35558	500A	35150	35534	
S2N 160 F R	In 63A	320A	35176	35560	630A	35152	35536	
S2N 160 F R	In 80A	400A	35178	35562	800A	35154	35538	
S2N 160 F R	In 100A				1000A	35156	35540	
S2N 160 F R	In 125A				1250A	35158	35542	
S2N 160 F R	In 160A				1600A	35160	35544	

* Cable section = 1 x 2.5...50 mm²

** Cable section = 1 x 35...95 mm²