MOTORIZED UNIT | SWITCH - DISCONNECTORS O-I

series UM-S

UM-S
Motorized unit kit for base mounting switches 2P - 3P - 3P+N | 6P - 8P

S5 Sizes 1-2 ready to motorize (250A... 800A)
S6 Sizes 1-2 ready to motorize (200A... 800A)
S6N Size 1 ready to motorize (125A... 400A)

		CODE - 2P *(1)	CODE - 3P *(1)	CODE - 3P+N *(1)		CODE - 230 Vac *(1)
Size 1 | S5	250A	-	S5-02503PRC	S5-02503NRC	UM	UM-S1A230Z
	315A	-	S5-03153PRC	S5-03153NRC		
	400A	-	S5-04003PCC	S5-04003NCC		
	500A	-	S5-05003PRC	S5-05003NRC		
Size 2 | S5	630A	-	S5-06303PRC	S5-06303NRC	UM	UM-S2A230Z
	800A	-	S5-08003PCC	S5-08003NCC		
	200A	S6-02002PSC	S6-02003PSC	S6-02003NSC		
Size 1 | S6	250A	S6-02502PSC	S6-02503PSC	S6-02503NSC	UM	UM-S1A230Z
	315A	S6-03152PSC	S6-03153PSC	S6-03153NSC		
	400A	S6-04002PDC	S6-04003PDC	S6-04003NDC		
	500A	S6-05002PSC	S6-05003PSC	S6-05003NSC		
Size 2 | S6	630A	S6-06302PSC	S6-06303PSC	S6-06303NSC	UM	UM-S2A230Z
	800A	S6-08002PDC	S6-08003PDC	S6-08003NDC		

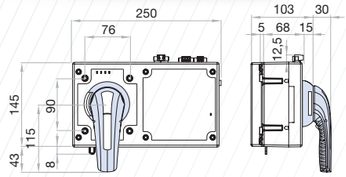
		CODE - 6P *(1)	CODE - 8P *(1)		
Size 1 | S6N	125A	-	S6N01256PSC	S6N01258PSC	UM	UM-S2A230Z
	160A	-	S6N01606PSC	S6N01608PSC		
	200A	-	S6N02006PSC	S6N02008PSC		
	250A	-	S6N02506PSC	S6N02508PSC		
	315A	-	S6N03156PSC	S6N03158PSC		
	400A	-	S6N04006PDC	S6N04008PDC		

UM + S5|S6|S6N normal mounting

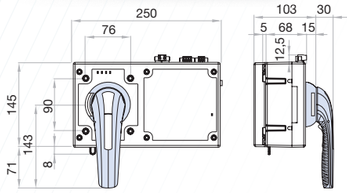
* Auxiliary manual handle supplied with the UM

Dimensions (mm)

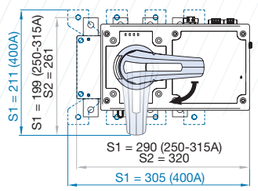
UM for size 1



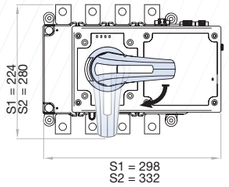
UM for size 2



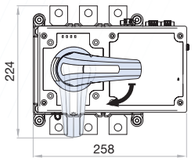
S5 size 1-2 + UM



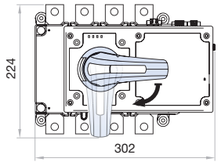
S6 size 1-2 + UM

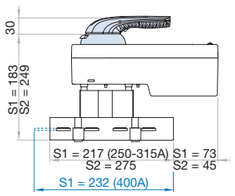


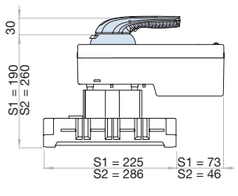
S6N 6P size 1 + UM

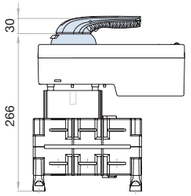


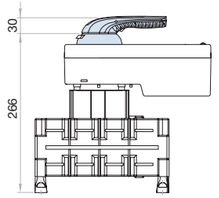
S6N 8P size 1 + UM











Technical information

CE IEC

According to IEC 60947-3

UM

		UM for S5|S6 size 1	UM for S5|S6 size 2	UM for S6N size 1
Operational torque	Nm	20	30	30
Voltage supply	V	230 Vac *(2)	230 Vac *(2)	230 Vac *(2)
Operating voltage range *(3)	ΔV	0,95*V a 1,10*V	0,95*V a 1,10*V	0,95*V a 1,10*V
Operating voltage range according to IEC 60947-6	ΔV	0,95*V a 1,10*V	0,95*V a 1,10*V	0,95*V a 1,10*V
Cable section of voltage supply	mm^2	1,5 - 2,5	1,5 - 2,5	1,5 - 2,5
Cable section area Input Signals	mm^2	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5
Cable section area Auto-Lock mode Outputs	mm^2	0,5 - 1,5	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	1,1	1,5	1,5
Use current (Irms)	mA	45	45	45
Use current (Imax)	mA	137	137	137
Protective Fuse | Reference F1AL250 V (Littelfuse)	A	1	1	1
Operating angle		0-90° (0 - I)	0-90° (0 - I)	0-90° (0 - I)
Number of UM operations	Cycles	8000	5000	8000
Operation rate (0 - I)	Cycles/hour	120	60/120	120
Working temperature range		- 25°C ... + 55°C	- 25°C ... + 55°C	- 25°C ... + 55°C
Transportation and storage temperature		- 40°C ... + 70°C	- 40°C ... + 70°C	- 40°C ... + 70°C
UM weight	Kg	1,8	1,8	1,8

Pos.	Direction	Pos.	Operating time *(3)
0	→	I	750 ms
I	→	0	750 ms

*(1) UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting. For different type of mounting or different code of switch or UM kit please consult.

*(2) For DC values, consult please.

*(3) Based in our own tests.

EMC table (Electromagnetic compatibility)

Inmunity

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Electrostatic discharges	EN 61000-4-2	Special, B	Special, A	Special, A	±8KV air discharge ±4KV equipment discharge
Electromagnetic H.F. field	EN 61000-4-3	Level 3, A	Level 3, A	Level 3, A	10V/m. from 80MHz to 1 GHz
Fast transients (Burst)	EN 61000-4-4	Level 3, B	Level 3, A	Level 4, A	±4KV power supply, freq. Rep. 2,5kHz ±2KV signal supply, freq. Rep 5kHz
Fast transient (surge discharge)	EN 61000-4-5	Level 3, B	Level 3, A	Special, A	±4KV power supply L1-L2 Generator impedance 2Ω (wave 1,2/50 ms)
Conducted disturbances	EN 61000-4-6	Level 3, A	Level 3, A	Level 3, A	10V supply and signal
Electromagnetic field, industrial frequency	EN 61000-4-8	Level 4, A	-	Level 4, A	Field intensity 30A/m
Voltage dips, interruptions and voltage variations	EN 61000-4-11	Criterion B	-	Criterion A	30% Un - 1000 ms
		Criterion C	-	Criterion A	60% Un - 1000 ms
		Criterion C	-	Criterion B	95% Un - 5000 ms

Emission

Test	Standard	According to standard UNE/EN 61000	According to standard IEC 60947-6	Results achieved	Values achieved in tests
Emission of harmonic current	EN 61000-3-2	Level 3	Level 3	Level 3	0,02A total current (manual mode)
		Level 3	Level 3	Level 3	0,04A total current (automatic mode)
Unwanted voltage	EN 55011	Level 3	Level 3	Level 3	Qualified
Radiated emission	EN 55011	Level 3	Level 3	Level 3	Qualified

NOTE: The installation of this device in a domestic environment can cause radiofrequency interference
EN 61000 is equivalent to IEC 61000 - EN 55011 is equivalent to CISPR11
CRITERION A: Normal service behaviour in determined limits
CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator
Test level 3: Typical industrial environment, without special installation measures
Test level 4: Severe industrial environment
Special level: Level of higher electromagnetic severe environment

MOTORIZED UNIT | SWITCH - DISCONNECTORS O-I

series UM-S

UM-S (MODBUS)

Motorized unit kit for base mounting switches 3P - 3P+N

S5 Sizes 3-4 ready to motorize (800A... 2000A)
S5N Size 5 ready to motorize (2000A... 3150A)

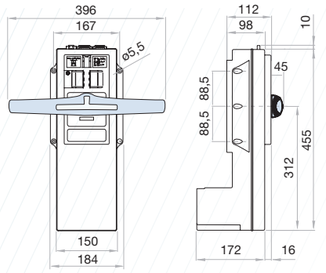
			CODE - 3P *(1)	CODE - 3P+N *(1)	CODE - 120 Vac *(1)	CODE - 230 Vac *(1)
Size 3 | S5	800A	S5-08003PRC	S5-08003NRC	UM	UM-S31120M	UM-S31230M
	1000A	S5-10003PCC	S5-10003NCC			
	1250A	S5-12503PCC	S5-12503NCC			
Size 4 | S5	1000A	S5-10003PSC	S5-10003NSC	UM	UM-S41120M	UM-S41230M
	1250A	S5-12503PSC	S5-12503NSC			
	1600A	S5-16003PSC	S5-16003NSC			
	1800A	S5-18003PSC	S5-18003NSC			
	2000A	S5-20003PDC	S5-20003NDC			
Size 5 | S5N	2000A	S5N20003PPC	S5N20003NPC	UM	-	UM-S56230M
	2500A	S5N25003PPC	S5N25003NPC			
	3150A	S5N31503PPC	S5N31503NPC			

UM + S5 size 3 normal mounting
UM + S5 size 4 normal mounting
UM + S5N size 5 normal mounting

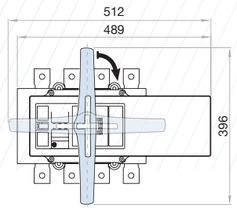
* Auxiliary manual handle supplied with the UM

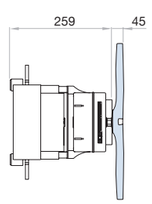
Dimensions (mm)

UM

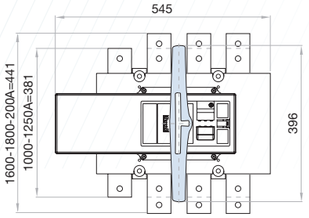


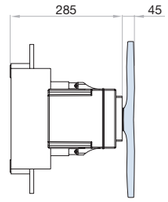
S5 size 3 + UM



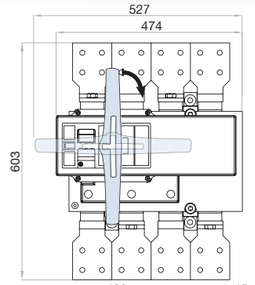


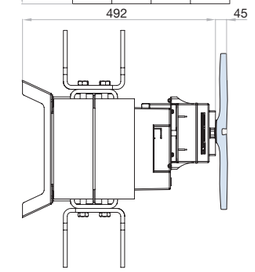
S5 size 4 + UM





S5N size 5 + UM





Technical information

CE IEC

According to IEC 60947-3

UM

Voltage supply		120 Vac *(2)	230 Vac *(2)
Operating voltage range *(3)	ΔV	0,95*V to 1,10*V	
Cable of voltage supply	mm²	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals	mm²	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs	mm²	0,5 - 1,5	0,5 - 1,5
Inrush Current	A	11	11
Nominal Current during operation	A	-	3,9
Use current (Irms)	A	0,041	0,041
Use current (Imax)	A	0,275	0,275
Protection Fuse | Reference F4AL250V (Littelfuse)	A	4	4
Operating time	s	0,275	0,275
Number of UM operations S5/3 - S5/4	Cycles	3000	3000
Operation rate (0-I-0) *(4)	Cycles/hour	20	20
Number of UM operations S5N/5	Cycles	600	600
Operation rate (0-I-0) *(4)	Cycles/hour	20	20
Working temperature range	Tª 85%Un	- 25ºC ... + 55ºC	
	Tª Un	- 25ºC ... + 55ºC	
	Tª 115%Un	- 25ºC ... + 55ºC	
Transportation and storage temperature		- 40ºC ... + 70ºC	
UM weight	Kg	4,4	

*(1) UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting.
For different type of mounting or different code of switch or UM Kit please consult.

*(2) For DC values, consult please.

*(3) Operating voltage range for the reference UM-S56230M is 0,9*Vn to 1,1*Vn

*(4) According to IEC 60947-3.

EMC table (Electromagnetic compatibility)

Emission

Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C

Inmunity

Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/-2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/-4KV power supply Generator impedance 2Ω Wave 1,2/50µs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	100% Un - 10ms	B	A	C
		N.A.	100% Un - 20ms	B	A	C
		N.A.	60% Un - 200ms	C	A	C
		N.A.	30% Un - 500ms	C	A	C
		N.A.	20% Un - 5000ms	C	A	C
		N.A.	100% Un - 5000ms	C	C	C

CRITERION A: Normal service behaviour in determined limits
CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator
Test level 3: Typical industrial environment, without special installation measures
Test level 4: Severe industrial environment
Special level: Level of higher electromagnetic severe environment

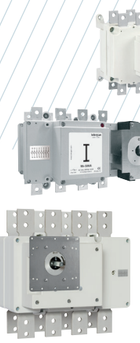
MOTORIZED UNIT | SWITCH - DISCONNECTORS O-I

series UM-S

UM-S (MODBUS)

Motorized unit kit for base mounting switches 6P - 8P

S6N Size 2 ready to motorize (500A... 630A)
S5M Size 3 ready to motorize (800A... 1000A)
S5N Size 4 ready to motorize (1250A... 2000A)



		CODE - 6P *(1)	CODE - 8P *(1)		CODE - 120 Vac *(1)	CODE - 230 Vac *(1)
Size 2 | S6N	500A	S6N05006PRC	S6N05008PRC	UM	UM-S26120M	UM-S26230M
	630A	S6N06306PRC	S6N06308PRC			
Size 3 | S5M	800A	S5M08006PRC	S5M08008PRC	UM	UM-S35120M	UM-S35230M
	1000A	S5M10006PCC	S5M10008PCC			
Size 4 | S5N	1250A	S5N12506PSC	S5N12508PSC	UM	-	UM-S56230M
	1600A	S5N16006PSC	S5N16008PSC			
	1800A	S5N18006PSC	S5N18008PSC			
	2000A	S5N20006PDC	S5N20008PDC			

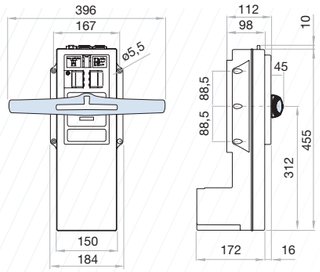
UM + S6N normal mounting
UM + S5M normal mounting
UM + S5N normal mounting

UM + S5M inverted mounting *(5)
(please consult UM codes)

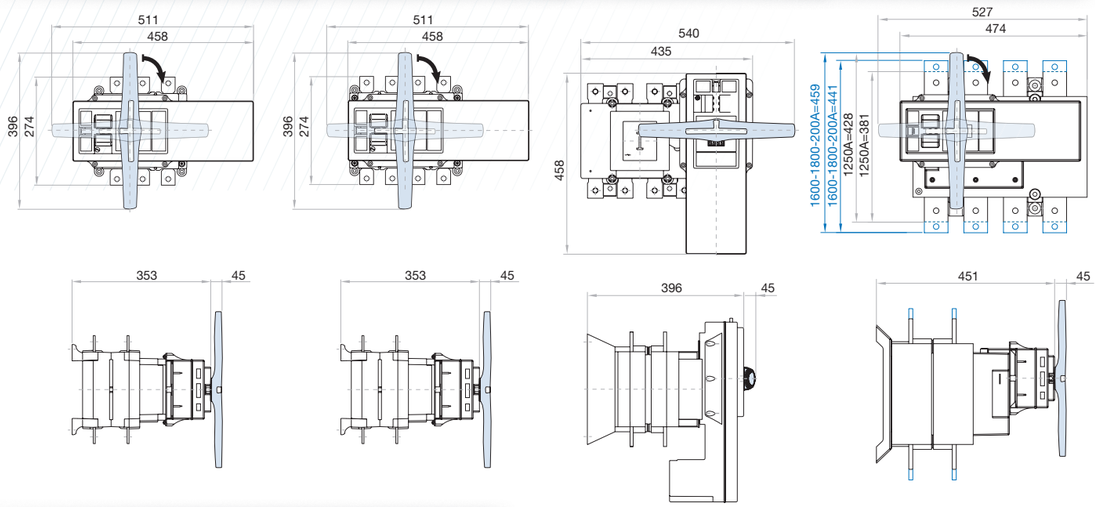
* Auxiliary manual handle supplied with the UM

Dimensions (mm)

UM



S6N 6P size 2 + UM | S6N 8P size 2 + UM | S5M size 3 + UM | S5N size 4 + UM



Technical information

CE IEC

According to IEC 60947-3

UM

Voltage supply			120 Vac *(2)	230 Vac *(2)
Operating voltage range *(3)		ΔV	0,95*V to 1,10*V	
Cable of voltage supply		mm^2	1,5 - 2,5	1,5 - 2,5
Cable section area Input & MODBUS Signals		mm^2	0,5 - 1,5	0,5 - 1,5
Cable section area Outputs		mm^2	0,5 - 1,5	0,5 - 1,5
Inrush Current	S6N	A	6,3	5,5
	S5M|S5N	A	11	11
Nominal Current during operation	S6N	A	3	3
	S5M|S5N	A	-	3,9
Use current (Irms)		A	0,041	0,041
Use current (Imax)		A	0,275	0,275
Protection Fuse | Reference F4AL250V (Littelfuse)		A	4	4
Operating time	S6N	s	0,25	0,25
	S5M|S5N	s	0,275	0,275
Number of UM operations S6N/2		Cycles (category B)	1000	1000
Operation rate (0-I-0) *(4)		Cycles/hour	60	60
Number of UM operations S5M/3		Cycles	3000	3000
Operation rate (0-I-0) *(4)		Cycles/hour	20	20
Number of UM operations S5N/4		Cycles	600	600
Operation rate (0-I-0) *(4)		Cycles/hour	20	20
Working temperature range		Tª 85%Un	- 25ºC ... + 55ºC	
		Tª Un	- 25ºC ... + 55ºC	
		Tª 115%Un	- 25ºC ... + 55ºC	
Transportation and storage temperature			- 40ºC ... + 70ºC	
UM weight		Kg	4,4	

*(1) UM Kit code is related to the code of switch from its section depending on size and it is for normal mounting. For different type of mounting or different code of switch or UM Kit please consult.
*(2) For DC values, consult please.
*(3) Operating voltage range for the reference UM-S56230M is 0,9*Vn to 1,1*Vn
*(4) According to IEC 60947-3.
*(5) For inverted mounting there are references for UM with inverted frontal plates. Supply under request.

EMC table (Electromagnetic compatibility)

Emission

Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Unwanted voltage	EN 55011	150kHz-30MHz	N.A.	N.A.	N.A.	C
Radiated emission	EN 55011	30MHz-1GHz	N.A.	N.A.	N.A.	C
Emission of harmonic current	EN 61000-3-2	0,02A 0-2kHz	N.A.	N.A.	N.A.	C
Flicker	EN 61000-3-3	0-2kHz	N.A.	N.A.	N.A.	C

Inmunity

Test	Standard	Frequency range	Level	According to criterion	Criterion (test)	Result
Electrostatic discharges	EN 61000-4-2	Special, A +/- 8KV air discharge	SPECIAL	B	A	C
Electromagnetic H.F. field	EN 61000-4-3	10V/m De 80MHz a 2,7 Ghz	SPECIAL	A	A	C
Fast transients (Burst)	EN 61000-4-4	+/-2KV power supply +/- 1KV signal supply Rep 5kHz - 2min	3	B	A	C
Fast transient (surge discharge)	EN 61000-4-5	+/-4KV power supply Generator impedance 2Ω Wave 1,2/50µs	5	B	A	C
Conducted disturbances	EN 61000-4-6	10V supply and signal 0,15-80MHz	3	A	A	C
Electromagnetic field, industrial frequency	EN 61000-4-8	Field intensity 30A/m	4	A	A	C
Voltage dips, interruptions and voltage variations	EN 61000-4-11	N.A.	100% Un - 10ms	B	A	C
		N.A.	100% Un - 20ms	B	A	C
		N.A.	60% Un - 200ms	C	A	C
		N.A.	30% Un - 500ms	C	A	C
		N.A.	20% Un - 5000ms	C	A	C
		N.A.	100% Un - 5000ms	C	C	C

CRITERION A: Normal service behaviour in determined limits
CRITERION B: Transient alteration of the service. The appliance gets back to the normal performing without the intervention of the operator
Test level 3: Typical industrial environment, without special installation measures
Test level 4: Severe industrial environment
Special level: Level of higher electromagnetic severe environment