Ordering information
Automatic transfer switches

Automatic transfer switches functionality

	OTM_C2D_	OTM_C3D_	OTM_C8D_
OTM_C_D products overview			
Includes automatic control unit	OMD200_	OMD300_	OMD800_
Manual operation with handle	x	x	x
Local operation with front panel keypad	x	x	x
Automatic transfer switching equipment (ATSE)	x	x	x
Dual power source for the motor operator[1)]	o	x	o
Measurements			
Three phase voltage measurement on LINE 1	x	x	x
Single phase voltage measurement on LINE 1	x	x	x
Three phase voltage measurement on LINE 2	x	x	x
Single phase voltage measurement on LINE 2	x	x	x
Frequency on LINE 1	x	x	x
Frequency on LINE 2	x	x	x
Possibility to check the measurements via LCD			x
Source failure detections			
No voltage	x	x	x
Undervoltage	x	x	x
Overvoltage	x	x	x
Phase missing	x	x	x
Voltage unbalance	x	x	x
Invalid frequency	x	x	x
Incorrect phase sequence			x
Configuration			
By DIP switches	x	x	
By rotary switches	x	x	
By keypad and LCD			x
Voltage threshold setting	x	x	x
Voltage hysteresis setting			x
Frequency threshold setting			x
Frequency hysteresis setting			x
Time delays			
Switching delay	x[2)]	x[2)]	x
Delay on transfer[3)]			x
Dead band time I-II (stop switching to position O)			x
Back-switching delay	x[4)]	x[4)]	x
Dead band time II-I (stop switching to position O)			x
Generator stop delay	x[5)]	x[5)]	x
Status of time delays on the LCD			x

[1)] Dual power source allows the motor operator to be supplied by two separate voltage supplies. This way the motor operator is always energized from the available line.
[2)] Four options: 0, 5, 10 or 30 seconds
[3)] Delaying the switching sequence before transferring to generator, guaranteeing that in cold locations the generator is properly warmed up
[4)] Two options: the duration of back-switching delay is the same as switching delay, i.e. the time delay is same for I - II and II - I, or the back-switching delay is fixed 300 seconds
[5)] Two options: the duration of generator stop delay is the same as Switching delay or fixed 5 min

x = included as standard
o = as an accessory

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Automatic transfer switches functionality

	OTM_C2D_	OTM_C3D_	OTM_C8D_
Features			
Generator start and stop	x	x	x
Off-load test sequence	x	x	x
On-load test sequence	x	x	x
Source status via front panel	x	x	x
Source status via digital outputs			x
Switch position via front panel	x	x	x
LCD[6]			x
Fieldbus interface[7]			x
Event/alarm log			x
Counter for number of operations			x
Auxiliary voltage supply[8]			x
Programmable digital inputs (eight) and digital outputs (six)			x
Secondary load control (load shedding)			x
Digital input - Allow transfer to secondary[9]			x
Digital input - Generator alarm[10]			x
Digital input - Remote control to positions I, O and II			x
Operating mode			
Line priority	x[11]	x[11]	x[12]
Manual back-switching[13]	x	x	x
Automatic operation to position O, in case of source failure[14]			x
Applications			
Transfer between two transformers	x	x	x
Transfer between a transformer and a generator	x	x	x

[6] Menus available in eight languages; English, French, German, Italian, Spanish, Russian, Chinese and Finnish
[7] Two-way communication, bus communication protocol is Modbus
[8] In case of source failure, the control unit can be supplied with an external auxiliary supply with 24…110 V DC
[9] Control unit requires an external signal before allowing the transfer to secondary
[10] Two options for the operating mode after receiving the alarm: control unit either works normally, or initiates generator stop with operation to position O
[11] Two options: No line priority, or Source 1 is the priority source
[12] Three options: No line priority, Source 1 or Source 2 is the priority source
[13] Automatic back-switching to primary source is prevented
[14] Control unit and motor operator must be energized

x = included as standard
o = as an accessory

Ordering information
Automatic transfer switches, IEC-types

OTM160...250E4WC3D_

OTM630...800E4C2D_

OTM1000...1250E4C3D_

Automatic transfer switches, I-O-II operation, open transition

Including a handle for manual operation, PCB connectors, bolt kit with nuts and washers for all terminals. Types OTM160…1600_C_D_, including a voltage sensing kit on the top of the switch. Voltage sensing kit on the bottom on the switch, available on request, please add letter “B” to the type code. For example, OTM160E4C2D230C ▸ OTM160E4C**B**2D230C. Types OTM160...1600E_ include a storage clip for the handle and spare fuses. Types OTM160...250_WC_D_ are equipped with extended phase distance.

No. of poles	Rated current AC-21A, AC-22A ≤ 415V, I[A]	Rated power 400V S[kVA]	Rated current AC-31B/ AC-33B 415V, I[A]	Type	Order number	Units/ type [pcs]	Weight/ unit [kg]
Automatic operation, OTM_C2D_ types, voltage sensing on the top							
Motor operator voltage U_e = 220...240 V AC[1)]							
4	160	110	160/160	OTM160E4C2D230C	1SCA106230R1001	1	11
4	160	110	160/160	OTM160E4WC2D230C	1SCA101033R1001	1	11
4	200	135	200/200	OTM200E4C2D230C	1SCA106671R1001	1	11
4	200	135	200/200	OTM200E4WC2D230C	1SCA101034R1001	1	11
4	250	170	250/250	OTM250E4C2D230C	1SCA101016R1001	1	11
4	250	170	250/250	OTM250E4WC2D230C	1SCA101035R1001	1	11
4	315	215	315/315	OTM315E4C2D230C	1SCA101059R1001	1	15
4	400	275	400/400	OTM400E4C2D230C	1SCA101060R1001	1	15
4	630	435	650/650	OTM630E4C2D230C	1SCA108434R1001	1	37
4	800	550	720/650	OTM800E4C2D230C	1SCA108439R1001	1	37
4	1000	680	1000/1000	OTM1000E4C2D230C	1SCA112858R1001	1	66
4	1250	850	1250/1000	OTM1250E4C2D230C	1SCA112857R1001	1	66
4	1600	1000	1600/1000	OTM1600E4C2D230C	1SCA112854R1001	1	70
Automatic operation, OTM_C3D_ types, voltage sensing on the top							
Including in-built dual power source for the motor operator. Motor operator voltage Ue = 220...240 V AC[1)]							
4	160	110	160/160	OTM160E4C3D230C	1SCA106305R1001	1	11
4	160	110	160/160	OTM160E4WC3D230C	1SCA106306R1001	1	11
4	200	135	200/200	OTM200E4C3D230C	1SCA106309R1001	1	11
4	200	135	200/200	OTM200E4WC3D230C	1SCA106310R1001	1	11
4	250	170	250/250	OTM250E4C3D230C	1SCA106313R1001	1	11
4	250	170	250/250	OTM250E4WC3D230C	1SCA106314R1001	1	11
4	315	215	315/315	OTM315E4C3D230C	1SCA106317R1001	1	15
4	400	275	400/400	OTM400E4C3D230C	1SCA106318R1001	1	15
4	630	435	650/650	OTM630E4C3D230C	1SCA108726R1001	1	37
4	800	550	720/650	OTM800E4C3D230C	1SCA108728R1001	1	37
4	1000	680	1000/1000	OTM1000E4C3D230C	1SCA112852R1001	1	66
4	1250	850	1250/1000	OTM1250E4C3D230C	1SCA112851R1001	1	66
4	1600	1000	1600/1000	OTM1600E4C3D230C	1SCA112848R1001	1	70

[1)] Under nominal conditions

Handles and bolt kits included as standard

Suitable for switches	Handle	Bolt kit
OTM160...250	OTV250ECMK	M8x25
OTM315...400	OTV400ECMK	M10x30
OTM630...800	OTV800ECMK	M12x40
OTM1000...1600	OTV1000ECMK	M12x60

Ordering information
Automatic transfer switches, IEC-types

OTM160...250E3C8D_

OTM315...400E4C8D_

OTM1600E3C8D_

Automatic transfer switches, I-O-II operation, open transition

Including a handle for manual operation, PCB connectors, bolt kit with nuts and washers for all terminals. Types OTM160…1600_C_D_, including a voltage sensing kit on the top of the switch. Voltage sensing kit on the bottom on the switch, available on request, please add letter “B” to the type code. For example, OTM160E4C8D230C ▸ OTM160E4C**B**8D230C. Types OTM160...1600E_ include a storage clip for the handle and spare fuses. Types OTM160...250_ WC_D_ are equipped with extended phase distance.

No. of poles	Rated current AC-21A, AC-22A ≤ 415V, I[A]	Rated power 400V S[kVA]	Rated current AC-31B/ AC-33B 415V, I[A]	Type	Order number	Units/ type [pcs]	Weight/ unit [kg]
Automatic operation, OTM_C8D_ types, voltage sensing on the top							
Motor operator voltage U_e = 220...240 V AC[1]							
3	160	110	160/160	OTM160E3C8D230C	1SCA101017R1001	1	10
3	160	110	160/160	OTM160E3WC8D230C	1SCA101036R1001	1	10
4	160	110	160/160	OTM160E4C8D230C	1SCA101020R1001	1	11
4	160	110	160/160	OTM160E4WC8D230C	1SCA101039R1001	1	11
3	200	135	200/200	OTM200E3C8D230C	1SCA101018R1001	1	10
3	200	135	200/200	OTM200E3WC8D230C	1SCA101037R1001	1	10
4	200	135	200/200	OTM200E4C8D230C	1SCA101021R1001	1	11
4	200	135	200/200	OTM200E4WC8D230C	1SCA101040R1001	1	11
3	250	170	250/250	OTM250E3C8D230C	1SCA101019R1001	1	10
3	250	170	250/250	OTM250E3WC8D230C	1SCA101038R1001	1	10
4	250	170	250/250	OTM250E4C8D230C	1SCA101022R1001	1	11
4	250	170	250/250	OTM250E4WC8D230C	1SCA101041R1001	1	11
3	315	215	315/315	OTM315E3C8D230C	1SCA101062R1001	1	14
4	315	215	315/315	OTM315E4C8D230C	1SCA101063R1001	1	15
3	400	275	400/400	OTM400E3C8D230C	1SCA101061R1001	1	14
4	400	275	400/400	OTM400E4C8D230C	1SCA101064R1001	1	15
3	630	435	650/650	OTM630E3C8D230C	1SCA108452R1001	1	34
4	630	435	650/650	OTM630E4C8D230C	1SCA108453R1001	1	37
3	800	550	720/650	OTM800E3C8D230C	1SCA108454R1001	1	34
4	800	550	720/650	OTM800E4C8D230C	1SCA108455R1001	1	37
3	1000	680	1000/1000	OTM1000E3C8D230C	1SCA112868R1001	1	57
4	1000	680	1000/1000	OTM1000E4C8D230C	1SCA112861R1001	1	66
3	1250	850	1250/1000	OTM1250E3C8D230C	1SCA112862R1001	1	57
4	1250	850	1250/1000	OTM1250E4C8D230C	1SCA112864R1001	1	66
3	1600	1000	1600/1000	OTM1600E3C8D230C	1SCA112866R1001	1	60
4	1600	1000	1600/1000	OTM1600E4C8D230C	1SCA112867R1001	1	70

[1] Under nominal conditions

Handles and bolt kits included as standard

Suitable for switches	Handle	Bolt kit
OTM160...250	OTV250ECMK	M8x25
OTM315...400	OTV400ECMK	M10x30
OTM630...800	OTV800ECMK	M12x40
OTM1000...1600	OTV1000ECMK	M12x60