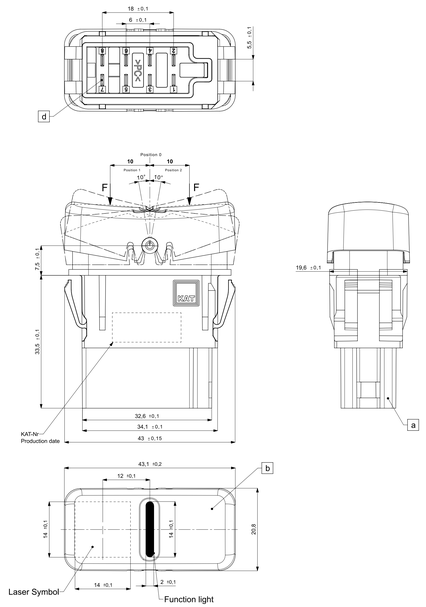
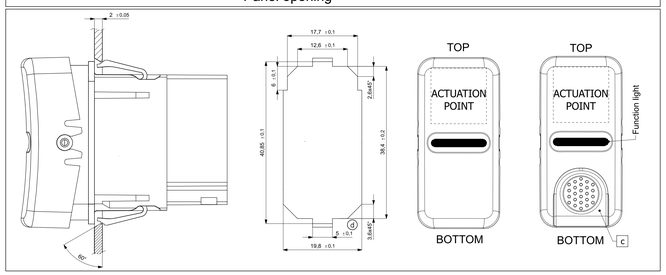
Üzerinde mavi renkli "KONTROLLÜ KOPYA " kapsesi bulunmayan dokümanlar kontrol dışı çoğaltılmışlar,geçerliliği yoktur. / Documents, do not bear a blue inked "Controlled Copy" stamp are without authorization and invalid.

Notlar/ Notes



Panel opening



GENERAL FEATURES

* Corrosion protection requirements acc. to M 3018
* Acc. to Specification : LH 255 002 and LH M3499
* Panel opening dimensions acc. to : M3499:A2
* Flammability : See table
* Do not touch plugs and connector receptacle!
* Parts which fall during handling and installing into vehicle on the ground shouls not be used.

ELECTRICAL FEATURES

Nominal voltage : 24 V DC
Max.voltage drop : Lower than 5 mV per A load in switch contact
Contact bounce : Lower than 5 ms with I : 5 mA bis 10 mA
Short-circuit resistance : continuous current 20 A closed contact
Operating voltage : 16-32 V
Overvoltage : 36 V / 1h at 40 C environment-temperature
Undervoltage : 10 V 30 sec.for start voltage 5G n.a.
Test voltage : 28 ± 0.2 V

Search illimunation:
min. current U = 16 V 1,9 mA
max. current U = 32V 4,5 mA

Function illimunation:
min. current U = 16 V 12 mA
max. current U = 32V 40 mA / Function controlindicator

Elektr.connection : 8 pole connector (AMP 106455)
100% current tested and values are being logged in the EOL.

MECHANICAL FEATURES

Mounting force : Lower than 5 N
Dismounting force : max.100 N (Min. 5 N when removal equipment is used)
Disassembly force of the connector min.50 N
Protection : actuator side IP52
: connector side IP40

Product life

Mechanical : 200.000 cycles
Electrical
Load switching : Resistive Load : 6 A/60 000 cycles
Inductive Load : 3 A/120 000 cycles
Electronic switching : Resistive Load : 12 mA/200 000 cycles
Hazard warning switch : Electronic Load : 5 mA/200 000 cycles

TEMPERATURE RANGE

Storage temp. : 2h/+95 ˚C
Operating temp. : from -40 to +80 ˚C
Arctic : -50 ˚C

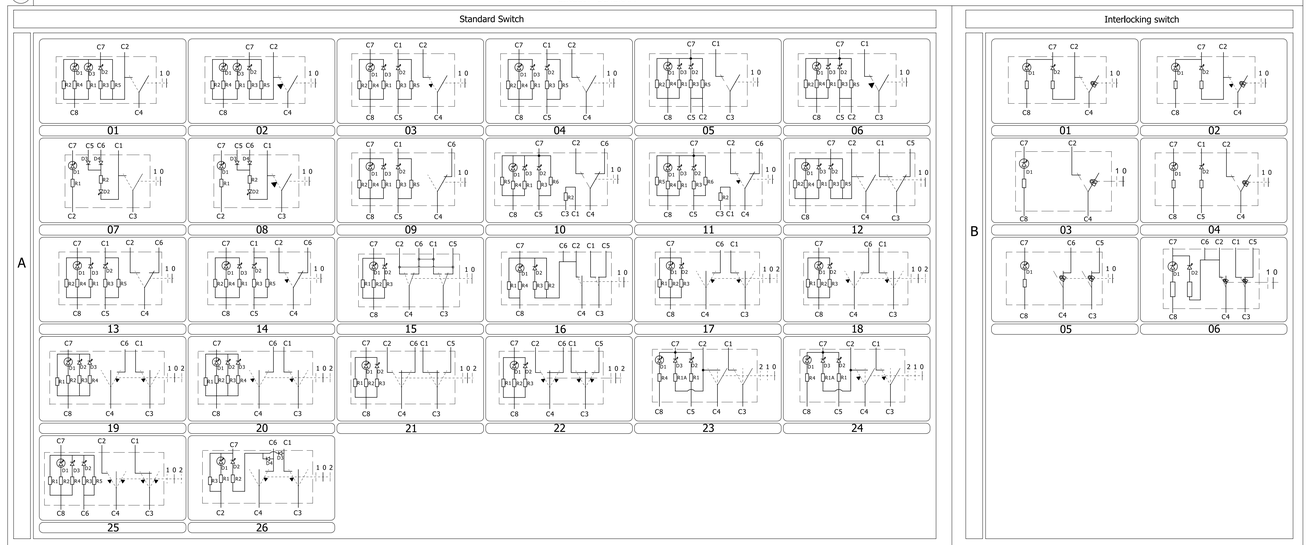
Item	Designation	Material	Flammability	Hardness	Coating	Color	Weight (g)
a	Housing	PC	UL94 V-0	N/A	N/A	Black	8
b	Actuator	Makrolon 2405 Series	UL94 V-2			See Actuator color details	3,7
c	Interlock	POM	UL94 HB			Red	0,1
d	Plugs	CuSn6 / 2.8 x 0.8mm	N/A	130-160 HV (R420)	Ag 2÷1 µm	N/A	0,4
e	Connector	PA66 GF30	UL94 HB	N/A	N/A	Black	4,5
f	Hole Plug 1	PA6 GF30					5,9
g	Hole Plug 2	PC					6,9
h	Panel	PA6 GF30					7,5

ORDERING SCHEME

1	2	3	4	5	6	7	8	9	10
—	—	—	—	—	—	—	—	—	—

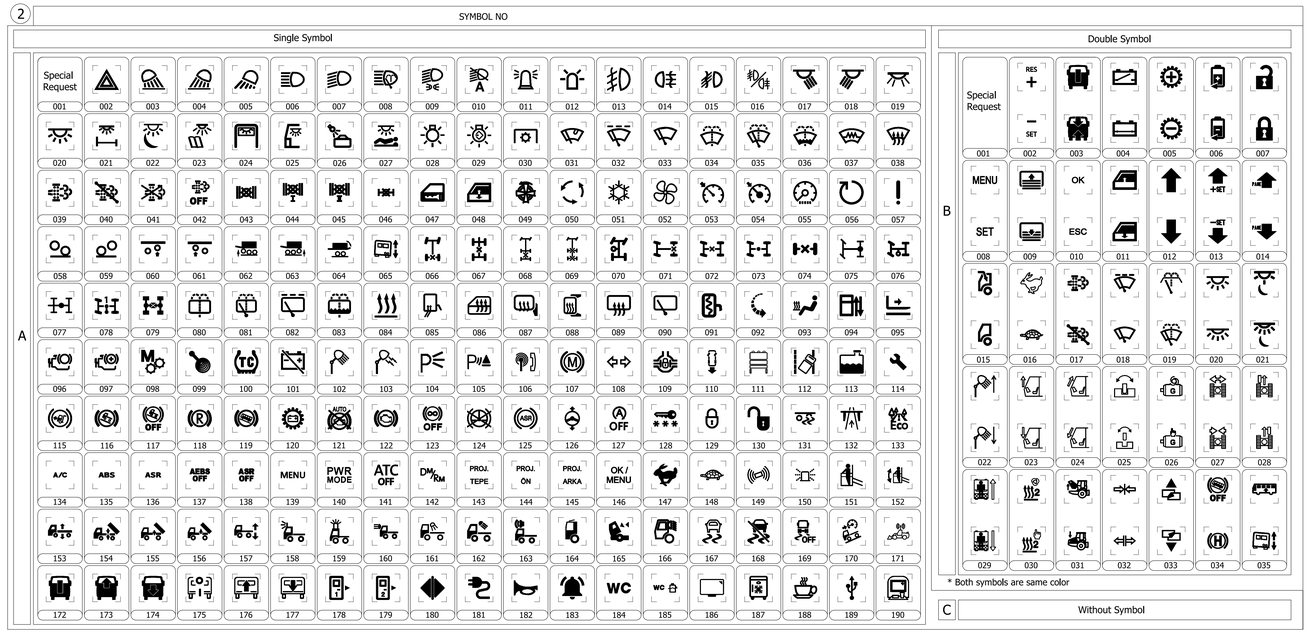
1- Circuit diagram
2- Symbol No
3- Assembly direction of Switch to the Customer Counter Part
4- Laser Symbol Night Illumination LED COLOR TABLE
5- Function Illumination LED COLOR TABLE
6- Function Night Illumination LED COLOR TABLE
7- Actuator Base Color
8- Actuator Paint Color
9- Actuator Lock Color
10- Contact Type

1 CIRCUIT DIAGRAM



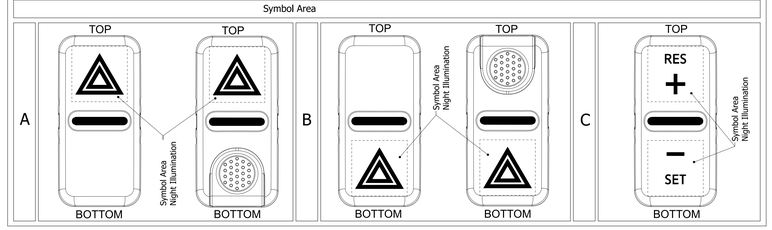
D1 LED : Laser Symbol Night illumination
D2 LED : Function illumination
D3 LED : Function Night illumination
Momentary Action
Lock

2 SYMBOL NO

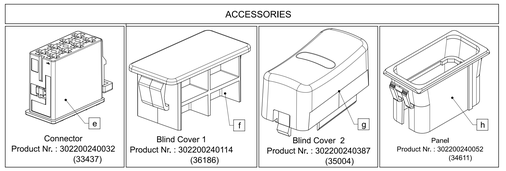


C Without Symbol

3 Assembly direction of Switch to the Customer Counter Part



ACCESSORIES



4 (D1)LASER SYMBOL NIGHT ILLUMINATION LED COLOR TABLE

A	Amber (Standard)
Y	Yellow
G	Green
R	Red
W	White
B	Blue
-	No LED

5 (D2)FUNCTION ILLUMINATION LED COLOR TABLE

A	Amber (Standard)
Y	Yellow
G	Green
R	Red
W	White
B	Blue
-	No LED

6 (D3)FUNCTION NIGHT ILLUMINATION LED COLOR TABLE

A	Amber (Standard)
Y	Yellow
G	Green
R	Red
W	White
B	Blue
-	No LED

7 ACTUATOR BASE COLOR

1	WHITE	-
2	RED	RAL 3020
3	GRAY	RAL 5008

8 ACTUATOR PAINT COLOR

1	BLACK (Standard)	RAL 9005
2	RED	RAL 3027
3	YELLOW	RAL 1018
4	ORANGE	RAL 2009

9 ACTUATOR LOCK COLOR

A	Black	RAL 9005
B	Red	RAL 3020
C	Yellow	RAL 1023
D	NO Actuator Lock	

10 CONTACT TYPE

1	Load switch	Flat / Bulky (AgSnO2)
2	Electronic Switches	Flat / Crown (AgNi0.15)

Revs. No / Revs. No	Revision Section	Tarih / Date	Isim / Name	Revizyon ismine / Revision description	Talep No / Order No
a	N/A	02.09.2010	MURAT TUTAR	Latest type switch and Latest type mechanical diagrams is added.	N/A
b	N/A	26.11.2011	C.TOPRAKHISAR	New actuator figure added. Mechanical diagram : base item added. Electrical diagram : Latest type switch added.	N/A
c	N/A	07.03.2012	C.TOPRAKHISAR	New actuator figure added. Mechanical diagram (A and B) Electrical diagram : base item added.	N/A
d	N/A	18.09.2012	C.TOPRAKHISAR	Panel opening dimension 5 was 3.	N/A
e	N/A	01.01.2019	KARAMULLU	Technical drawing updated	N/A
f	N/A	11.01.2024	KARAMULLU	Electrical diagrams and Actuator Symbol were added. Panel opening dimensions were added to Accessories. Only Cable have been added in spare. LED Function Night Illumination option is. Function Night Illumination LED COLOR TABLE. Contact Type 10, table added.	N/A
g	125	15.01.2026	KARAMULLU	ORANGE colour actuator added to Option 8.	N/A

Parça Durumu / Part Status	Seri /Series

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KAT

CAD sistemi ve yönetim kodu/CAD system and administration code	SIEMENS NX (*.prt)
Malzeme / SAP kod / Marlalama kodu Material / SAP code /Part marking code	See table
Ağırlık (g) / Weight	See table
Çekme mukavemeti (N/mm²)/Tensile strength	N/A
Kaplama malzemesi/Coating material	See table
Kaplama kalınlığı (µm)/Coating thickness	See table
Sertlik (HV)/Hardness	See table

	İsim/ Name	Tarih / Date	İmza / Signature	Proje kodu / Project code
Çizen / Drawn	Kadiriye Karabulut	22.07.2010		K24K,K024
Tasarım Sorumlusu Responsible design	Canan TOPRAKHISAR	22.07.2010		
Kontrol / Checked	Cem KABAHASANOĞLU	22.07.2010		

Güvenlik Gös. Safety Dev. N/A
Proje Adı Project Name: KAT ROCKER SWITCH

ISO 128

Ölçek/Scale 2:1 3:2
Resim No Drawing No: 95200240008 (95150)
Boyut Format A0
Sayfa Sheet 1
Toplam sayfa sayısı of 1

Genel tolerans/ Genel tolerans for nominal dimensions without specified tolerance: DIN 7168 mG.

Kontrol ölçü/ Control dim. ( ) Referans ölçü/Auxiliary dim. * SC * Önemli karakteristik ölçüsü /Significant characteristic dim. * CC * Kritik karakteristik ölçüsü / Critical characteristic dim. *Tüm ölçüler mm cinsindendir./All dimensions are in mm.

B04-FR4.23 Rev.4/31.05.2019

Üzerinde mavi renkli "KONTROLLÜ KOPYA " kaşesi bulunmayan dokümanlar kontrol dışı çoğaltılmıştır,geçerliliği yoktur. / Documents, do not bear a blue inked "Controlled Copy" stamp are without authorization and invalid.

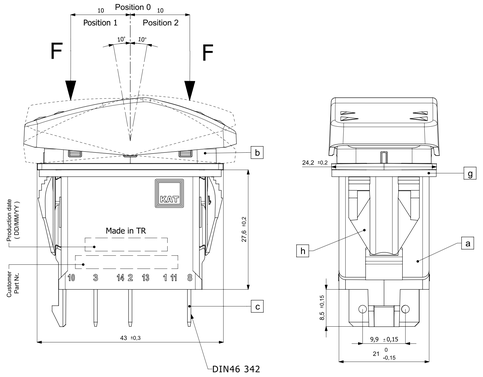
Notlar/ Notes

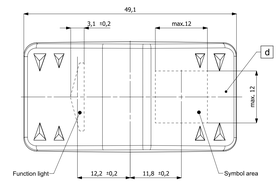
ORDERING SCHEME

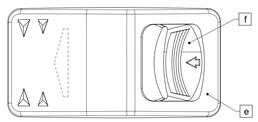
1	2	3	4	5	6	7	8	9
___	___	___	___	___	___	___	___	___

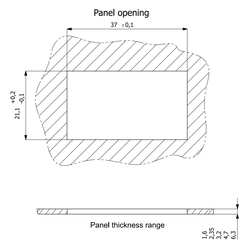
1- Circuit diagram
2- Symbol No
3- Assembly direction of Switch to the Customer Counter Part
4- Night Illumination LED COLOR TABLE
5- Function Illumination LED COLOR TABLE
6- Actuator Base Color
7- Actuator Paint Color
8- Voltage Rating
9- Actuator Lock Color

Rev. No. / Rev. No	Konum / Section	Tarih / Date	İçeri / Name	Revizyon ianesi / Revision description	Talep No / Order No
a	N/A	22.10.2012	MURAT TUTAR	Technical drawings renewed.	N/A
b	N/A	08.11.2012	C.TOPRAKHISAR	Night illumination was removed from diagrams 28,29,30.	N/A
c	N/A	20.02.2017	C.TOPRAKHISAR	New diagrams 31-45 are added.	N/A
d	N/A	20.04.2021	KAHRAMAN.LUT	Technical drawing updated	N/A
e	H23-D3	23.11.2022	KAHRAMAN.LUT	Option 5 added to the drawing, Yellow colour actuator added to Option 7.	N/A
f	M05	16.11.2023	KAHRAMAN.LUT	95200300029(M05), 95602-FR06 2022000101(Insert),BLIND COVER V2, 2011_BLIND COVER V3 added in KCD2D20W05.	N/A
g	F-G-D2-H24	19.01.2026	KAHRAMAN.LUT	ADL modes for options 6, 7, and 9 are added The orange cable option is added for the actuator	N/A









ELECTRICAL SPECIFICATIONS

Contact Rating	: 0,4VA / 24VDC(max.)resistive : 20 amps,4-14 VDC : 15 amps,15-28 VDC : 10A 14VT
Dielectric Strength	: 1500V RMS
Insulation Resistance	: 50 Megohms
Initial Contact Resistance	: 10 miliohms max./4 VDC
Electrical Life	: 50,000-100.000 cycles (circuit dependent)
Illumination	AB Led's are amber unless otherwise is stated. Wave length= 610 nm peak, luminous intensity 16-50 mcd.

MECHANICAL SPECIFICATIONS

Mechanical Life	150.000 cycles min.

MATERIAL

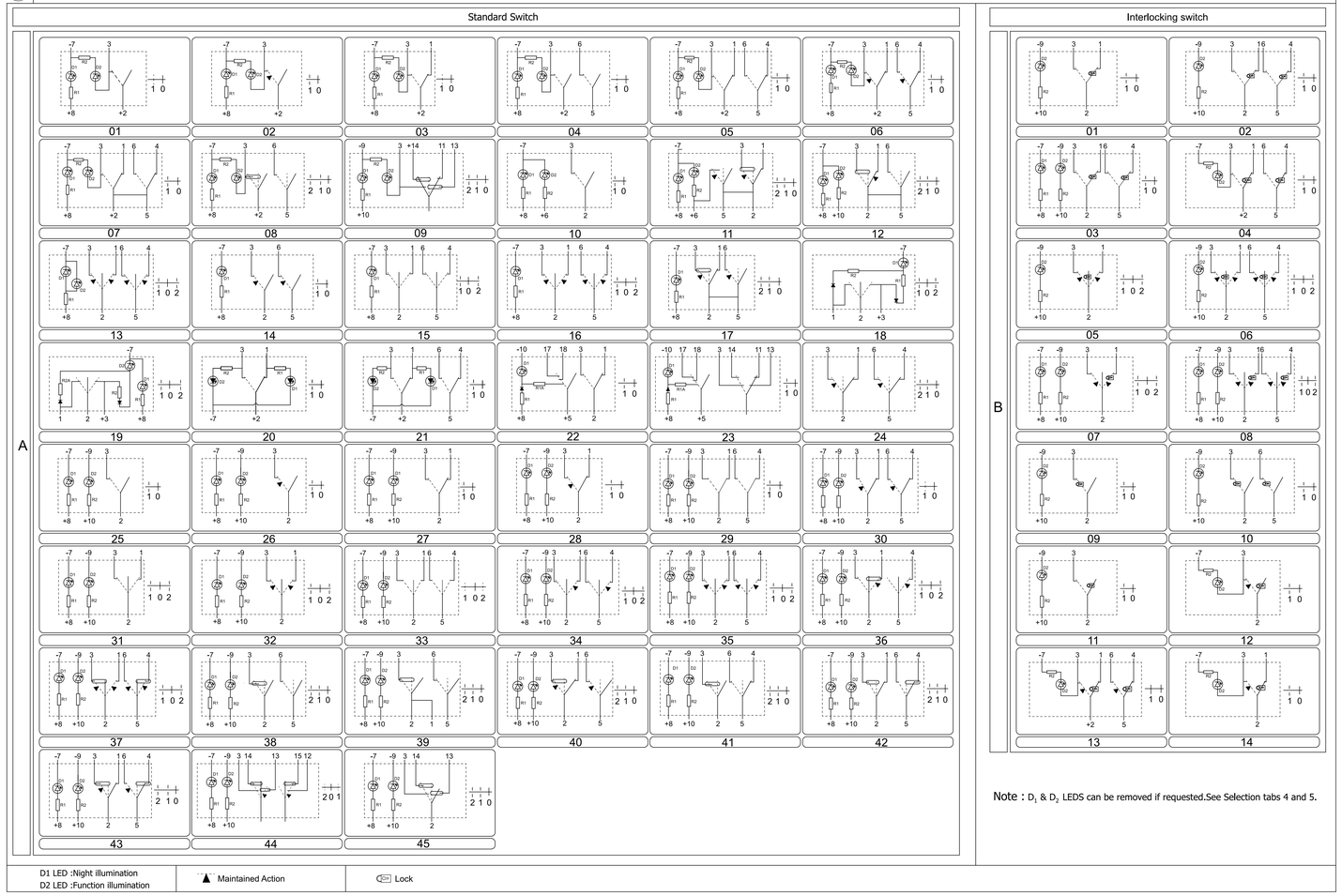
Terminals	Brass silver plated (6.3mm)Quick Connect Terminations standart.

ENVIRONMENTAL SPECIFICATIONS

Actuator side	IP68(With inserted actuator)
Terminal side	IP66(With inserted connector)
Operating Temperature	-40°C to + 85°C

Item	Designation	Material	Flammability	Hardness	Coating	Color	Weight (g)
a	Housing	PBT+PC	UL94 V-0	N/A	N/A	Black	9
b	Cover	PA6 GF30	UL94 V-0				2,2
c	Plugs	CuSn6	N/A	125-165 HV (R420)	Ag / 1-3µm	N/A	N/A
d	Actuator	PC	UL94 V-2	N/A	N/A	See Selection Section 7	3,6
e	Interlocking Actuator						3,55
f	Interlock	POM	UL94 HB			Red	0,65
g	Gasket	EPDM -42	N/A			Black	0,15
h	Clips	PA66 GF13	UL94 HB				0,35

1 CIRCUIT DIAGRAM



Note : D_1 & D_2 LEDS can be removed if requested.See Selection tabs 4 and 5.

4 (D1)NIGHT ILLUMINATION LED COLOR TABLE

A	Amber (Standard)
Y	Yellow
G	Green
R	Red
W	White
B	Blue
-	NO LED (1)

5 (D2)FUNCTION ILLUMINATION LED COLOR TABLE

A	Amber (Standard)
Y	Yellow
G	Green
R	Red
W	White
B	Blue
-	NO LED (1)

6 ACTUATOR BASE COLOR

1	White	-
2	Red	RAL 3020
3	Gray	RAL 5008

7 ACTUATOR PAINT COLOR

1	Black (Standard)	RAL 9005
2	Red	RAL 3027
3	Yellow	RAL 1018
4	Orange	RAL 2009

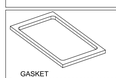
8 VOLTAGE RATING

A	12V
B	24V

9 ACTUATOR LOCK COLOR

A	Black	RAL 9005
B	Red	RAL 3020
C	Yellow	RAL 1023
D	NO Actuator Lock	

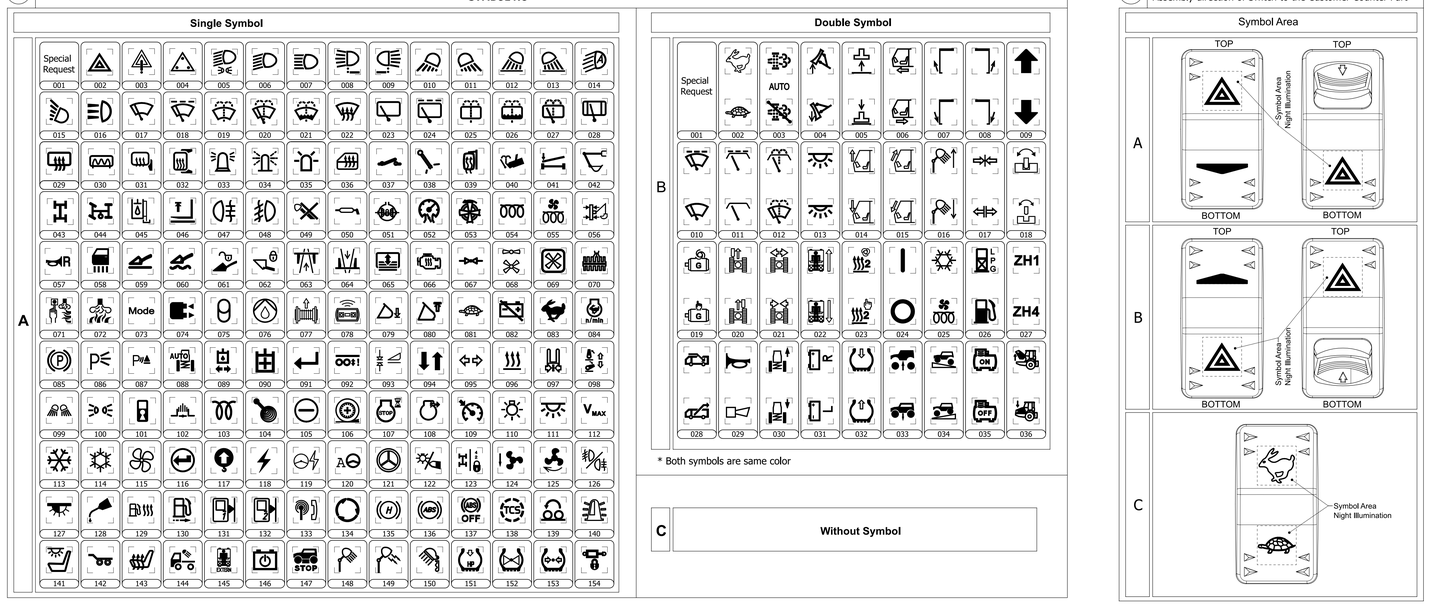
SPARE PARTS



GASKET
Product Nr : 302200300033 (34285)
For technical details ;
please, refer to drawing 95200300008 (95092)

CLIPS
Product Nr : 34284
For technical details ;
please,refer to drawing 95200300008 (95092)

2 SYMBOL NO

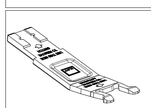


* Both symbols are same color

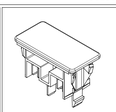
C Without Symbol

3 Assembly direction of Switch to the Customer Counter Part

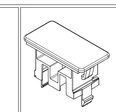
ACCESSORIES



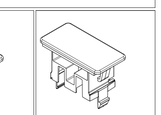
ACTUATOR AND SWITCH REMOVAL TOOL
Product Nr : 34280
For technical details ; please, refer to drawing 95200300008 (95092)



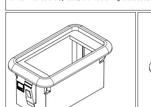
BLIND COVER
Product Nr : 302200300013 (34076)
For technical details ;
please, refer to drawing 95200300008 (95092)



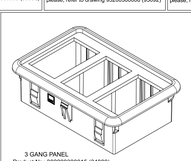
BLIND COVER V2
Product Nr : 302200300107 (35441)
For technical details ;
please, refer to drawing 95200300008 (95092)



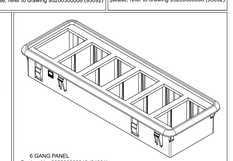
BLIND COVER V3
Product Nr : 35714
For technical details ;
please, refer to drawing 95200300008 (95092)



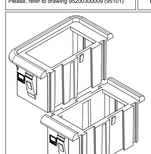
SINGLE FRAM
Product Nr : 302200300279 (36882)
For technical details ;
Please, refer to drawing 95200300009 (95101)



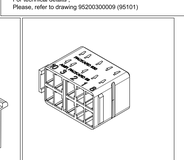
3 GANG PANEL
Product Nr : 302200300015 (34080)
For technical details ;
Please, refer to drawing 95200300009 (95101)



6 GANG PANEL
Product Nr : 302200300016 (34081)
For technical details ;
Please, refer to drawing 95200300009 (95101)



MODULAR PANEL
For technical details ;
please, refer to drawing 95200300011 (95103)



CONNECTOR
For technical details ;
Please, refer to drawing 95200300018 (95230)

İzometrik görünüş / Isometric view
Ölçek/Scale
N/A

Parça Durumu / Part Status	Seri / Series

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KAT

CAD sistemi ve yönetim kodu/CAD system and administration code	SIEMENS NX (*.prt)
Malzeme / SAP kod / Malzeme kodu Material / SAP code /Part marking code	Renk / Color See table
See table	
Ağırlık (g) / Weight: See table	
Çekme mukavemeti (N/mm²)/Tensile strength: N/A	Sertlik (HV)/Hardness: See table
Kaplama malzemesi/Coating material: See table	
Kaplama kalınlığı (µm)/Coating thickness: See table	

	İsim/ Name	Tarih / Date	İmza / Signature	Proje kod/ Project code
Çizen / Drawn	MURAT TUTAR	17.08.2010		K30K,K030
Tasarım Sorumlusu / Responsible design	MURAT TUTAR	17.08.2010		
Kontrol / Checked	Cem KABAHASANOĞLU	17.08.2010		

Güvenlik Dok. / Safety Doc. N/A
Proje Adı / Project Name: GENERAL CUSTOMER DRAWING

ISO / GD

Ölçek/Scale 2:1 N/A	Resim No / Drawing No 95200300017 (95190)	Büyüklük / Format	A0
		Sayfa / Sheet	1
		Toplam sayfa / of	1

Normal ölçülerde belirtilmeyen tolerranslar için genel tolerranslar
General tolerances for nominal dimensions without specified tolerance: DIN 2768 mK.

Kontrol ölç./ Control dim. ( ) Referans ölçü/Auxiliary dim. * SC * Önemli karakteristik ölçüsü /Significant characteristic dim. * CC * Kritik karakteristik ölçüsü / Critical characteristic dim. *Tüm ölçüler mm cinsindendir,/All dimensions are in mm.