Tap Position Interface

Type: REG-SK1

* *1 ... 29 tap positions into BCD*
* *wall-mounting case design*
* *with DIN-rail adapter*
* *with connection cable for 1.5 m*

Function

The tap position interface REG-SK1 converts the tap position of a contact row from a transformer with on-load tap-changer into a BCD signal.
The installation near a contact row reduces the number of connection cables to the voltage regulator system from 29 to 7.
An external supply voltage is connected to the middle contact of the contact row. Switching contacts transfer the signal to the REG-SK1 which will then be converted into a BCD code by a diode matrix . The outputs of the tap position interface can be connected directly to the BCD inputs of the voltage regulator REG-D/DA or any other device. All inputs are protected against malfunction.

- 29 switching positions are converted into BCD code
- control cable with a small number of cores is used
- cable length between REG-SK1 and the voltage regulator system REGSys™ can be up to 100 m
- wide external auxiliary voltage range
- with suitable adapters for DIN-rail mounting (TS35) and G-rail mounting (TS32)

Technical Data

Inputs

rated voltage U1
with switch closed 18 ... 230 V AC/DC

Input: 1 out of n (only one contact closed)	Output: BCD-code 20	10	8	4	2	1
tap position 1	0	0	0	0	0	1
tap position 2	0	0	0	0	1	0
"						
tap position 10	0	1	0	0	0	0
tap position 11	0	1	0	0	0	1
"						
tap position 29	1	0	1	0	0	1

Output

load impedance on BCD-output	≥ 5 kΩ
internal voltage drop	1 V + I_2 · 450 Ω
diode reverse voltage	400 V DC
input capacity	0,010 µF / 500 V DC
output capacity	1 µF / 400 V DC

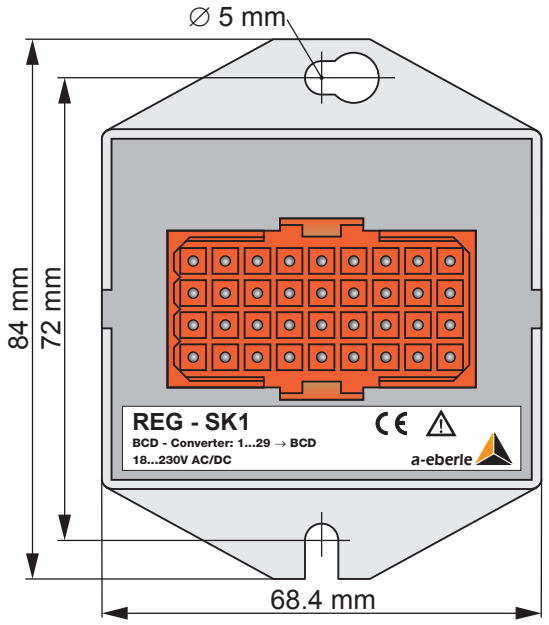
Insulation Coordination

protective class	II
overvoltage category	II
pollution grade	2
nominal circuit voltage	DC/AC 230 V
test voltage	2,3 kV

Temperature

operation / storage, transport	-10 ...+70°C / -20 ...80°C

Mechanical Data



Contact Assignments REG-SK1

(colours of cables according to DIN 47100)

AMP 36	Function	Colour of cable
P2-1	tap position 4	white
P2-2	tap position 2	brown
P2-3	tap position 1	green
P2-4	tap position 3	yellow
P2-5	tap position 8	grey
P2-6	tap position 6	pink
P2-7	tap position 5	blue
P2-8	tap position 7	red
P2-9	tap position 12	black
P2-10	tap position 10	violet
P2-11	tap position 9	grey/pink
P2-12	tap position 11	red/blue
P2-13	tap position 16	white/green
P2-14	tap position 14	brown/green
P2-15	tap position 13	white/yellow
P2-16	tap position 15	yellow/brown
P2-17	tap position 20	white/grey
P2-18	tap position 18	grey/brown
P2-19	tap position 17	white/pink
P2-20	tap position 19	pink/brown
P2-21	tap position 24	white/blue
P2-22	tap position 22	brown/blue
P2-23	tap position 21	white/red
P2-24	tap position 23	brown/red
P2-25	tap position 28	white/black
P2-26	tap position 26	brown/black
P2-27	tap position 25	grey/green
P2-28	tap position 27	yellow/grey
P2-29	BCD4	pink/green
P2-30	BCD1	yellow/pink
P2-31	tap position 29	green/blue
P2-32	BCD2	yellow/blue
P2-33	GND	green/red
P2-34	BCD8	yellow/red
P2-35	BCD10	green/black
P2-36	BCD20	yellow/black

design:	wall-mounting case PVC, grey 68 x 84 x 56 mm (B x H x T)
connector	1 plug: F1, 36 pins
protection	IP20 case with plugged AMP connector, connection cable included
weight	≤ 1.0 kg
DIN-rail adapter	screwed TS 35 DIN-rail for 7.5 mm height TS 35 DIN-rail for 15 mm height TS 32 G-rail

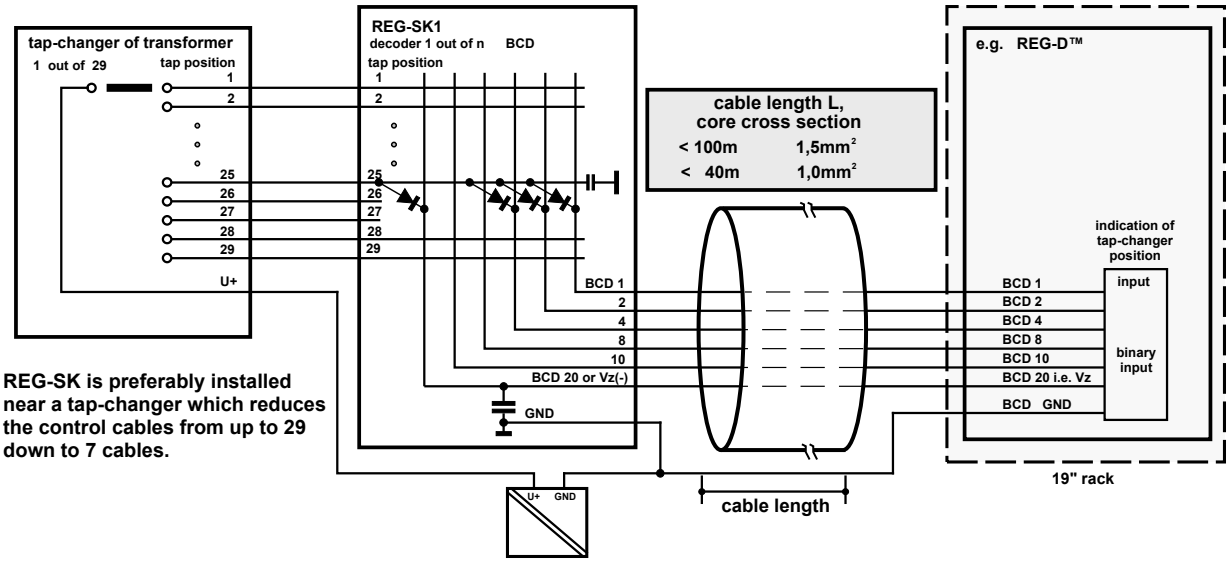
Standards

IEC 1010 / EN 61010 (VDE 0411)
EN 61326-1/A1
IEC 529
DIN 47100

Order Details

Characteristics	Code
tap-position interface, wall-mounting design (adapter for DIN-rail i.e. G-rail) for contact row of the motor drive, cable for 1.5 m included. Input: 1...29 tap positions Output: BCD	REG-SK1

Application: REG-SK1 connected to REG-D™



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