



CE

Bistable switches with communication

BICOM432-40-WM1

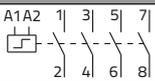
BICOM432-40-WM1 is bistable switch with modbus communication over IR connection. Bistable switch is a switching device with two stable states for switching off/on all kind of electrical loads. When the switch is not initiated electrically, manually or over a IR communication path, remains stable in its operating position and will change its operating position on initiation or actuation. Switch is controllable over a IR communication interface always in a slave communication position. BICOM432-40-WM1 has built-in electro-mechanical check of the position status. BICOM432-40-WM1 is available as standalone unit, being also powered from own power source over an internal power supply.



Bistable switch with Infrared communication (IR) is special version for use in smart buildings, smart installations, demand-side-management and industry solutions. BICOM432-40-WM1 has four separated contacts for loads up to 32 A.

Infrared communication

AC

Type	Rated current I_n	Control voltage at 50 Hz	Wiring diagram	Ordering No.	Weight (g)	Packaging (pcs)
BICOM432-40-WM1	32 A	230 V		30.074.038	250	1



Technical characteristics

Dimensions

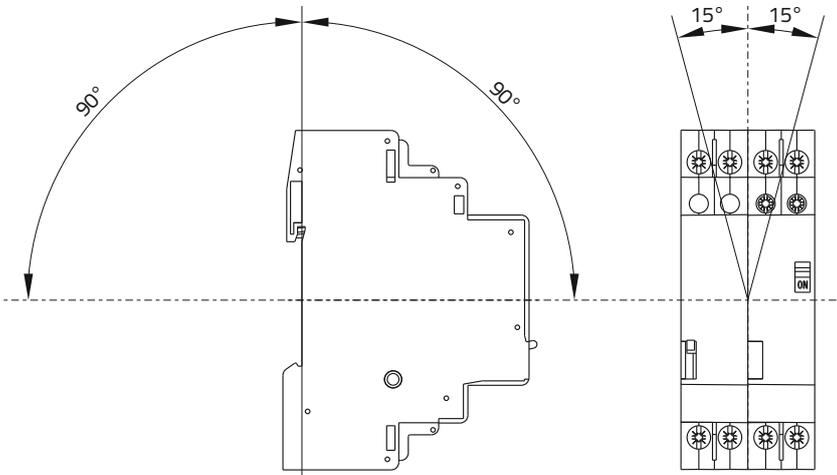
TECHNICAL DATA

Type	Symbol	Unit	B1432-40-WM1
Standards			IEC/EN 60669-2-2
Approvals			CE, CB
Module width			2
Number of poles			4
Degree of protection			IP20
Pollution degree			3
Climatic conditions			95 % relative humidity
Ambient temperature (open)		°C	-25 ... +55 (>55 ... +70 at max. impulse duration which is 1 min)
Storage temperature		°C	-30 ... +80
Maximum altitude U_1 and U_2 is reduced for 1.2 % and I_e for 0.4 % for every additional 100 m		m	2000
Number of contactors or switches side-by-side:			
≤40 °C			no limitation
(40 ... 55) °C			max. 3
(55 ... 70) °C			max. 1
Noise level (operation)		dB	0 (coil voltage is switched off)
Vibration resistance according to IEC/EN 60068-2-6	a	g	3 (Z axis)
Shock resistance according to IEC/EN 6068-2-27	a	g	15 (Z axis)
Maximum operating frequency with no load		op./h	450
Mechanical endurance		op. c.	1.000.000
Weight		g	195
Contact reliability			≥10 V; ≥100 mA
Minimum distance of open contacts		mm	>3
Power dissipation per pole		W	3
Overload current withstand capability: 10 s		A	96
Maximum back-up fuse for short-circuit protection g_L and g_G : coordination type 1	I_v	A	32
Rated insulation voltage	U_i	V	440
Rated impulse withstand voltage	U_{imp}	kV	4
Rated operational voltage	U_e	V	440
Rated frequency	f	Hz	50/60
Thermal current	I_{th}	A	32
Rated operational current for $\cos\phi = 0.6$ acc. to IEC/EN 60669-2-2			32
Maximum operating frequency for $\cos\phi = 0.6$ acc. to IEC/EN 60669-2-2		op./h	450
Electrical endurance for $\cos\phi = 0.6$ acc. to IEC/EN 60669-2-2		op. c.	100.000
Rated operational current for AC-1, AC-7a and AC-21	I_e	A	32
Operational power for AC-1, AC-7a and AC-21: single-phase 230 V three-phase 230 V three-phase 400 V	P_e	kW	7 12.1 21
Maximum operating frequency for AC-1, AC-7a and AC-21		op./h	450
Electrical endurance for AC-1, AC-7a and AC-21		op. c.	100.000
Rated operational current for AC-2	I_e	A	16
Operational power for AC-2: single-phase 230 V three-phase 230 V three-phase 400 V	P_e	kW	2.4 4.1 7.2
Maximum operating frequency for AC-2		op./h	120
Electrical endurance for AC-2		op. c.	100.000
Rated operational current for AC-3, AC-7b and AC-23	I_e	A	12
Operational power for AC-3, AC-7b and AC-23: single-phase 230 V three-phase 230 V three-phase 400 V	P_e	kW	1.1 3 5.5
Maximum operating frequency for AC-3, AC-7b and AC-23		op./h	450
Electrical endurance for AC-3, AC-7b and AC-23		op. c.	100.000
Rated operational current for AC-5a (at 230 V)	I_e	A	16
Maximum operating frequency for AC-5a		op./h	450
Electrical endurance for AC-5a		op. c.	100.000
Rated operational current for AC-5b (at 230 V)	I_e	A	16
Maximum operating frequency for AC-5b		op./h	450
Electrical endurance for AC-5b		op. c.	20.000

TECHNICAL DATA

		Symbol	Unit	B1432-40-WM1	
MAIN CIRCUIT	Type				
	Rated operational current for AC-6a (at 230 V)	I_e	A	4,5	
	Maximum operating frequency for AC-6a		op./h	450	
	Electrical endurance for AC-6a		op. c.	100.000	
	Switching of capacitors AC-6b and AC-7c (at 230 V)	C	μ F	150	
	Maximum operating frequency for AC-6b and AC-7c		op./h	450	
	Electrical endurance for AC-6b and AC-7c		op. c.	100.000	
	Rated operational current for DC-1 ($L/R \leq 1$ ms): 1 pole 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 2 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 3 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 4 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC	I_e	A	32/25/20/7/0.7	
	Maximum operating frequency for DC-1		op./h	300	
	Electrical endurance for DC-1		op. c.	100.000	
	Rated operational current for DC-3 ($L/R \leq 2$ ms): 1 pole 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 2 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 3 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 4 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC	I_e	A	18/10/4/1.2/0.3	
	Maximum operating frequency for DC-3		op./h	300	
	Electrical endurance for DC-3		op. c.	100.000	
	Rated operational current for DC-5 ($L/R \leq 7.5$ ms): 1 pole 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 2 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 3 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC 4 poles in series 24 V DC/48 V DC/60 V DC/110 V DC/ 220 V DC	I_e	A	18/6/3/0.8/0.1	
	Maximum operating frequency for DC-5		op./h	300	
	Electrical endurance for DC-5		op. c.	100.000	
	Terminal capacity: rigid (solid and stranded)	S	mm ²	1 ... 10	
	flexible			1 ... 10	
	Length of removed wire insulation		mm	9	
	Screw			M4	
	Screw head			PZ2	
	Tightening torque		Nm	1.2	
	COIL	Range of control voltage for switch-on	U_c	%	90 ... 110
		Range of control voltage for drop out	U_c	%	AC: 75 ... 20 / DC: 75 ... 10
		Kind of voltage			AC or DC
		Standard control voltages	U_c	V	230
		Frequency of AC control voltage	f	Hz	AC: 50 or 60
Control mode				remote control with impulse voltage / manual control	
Impulse duration of control voltage: minimum				AC: 50 ms / DC: 100 ms	
optimum - recommended				AC: 100 ... 500 ms / DC: 150 ... 500 ms	
maximum (only in case of breakdown of control system)				AC: 1 hour / DC: 1 minute	
Minimum duration between two impulses of control voltage			ms	AC: 150 / DC: 500	
Surge immunity withstand voltage 1.2/50 μ s acc. to standard IEC/EN 61000-4-5			kV	3	
Consumption: switch on/off operation			VA/W	AC: 18/13 / DC: 9/9	
stand-by				AC: 0,7/0,5 / DC: 0,7/0,5	
Delays: make			ms	AC: 5 ... 20 / DC: 8 ... 35	
brake				AC: 5 ... 20 / DC: 8 ... 35	
Terminal capacity: rigid (solid and stranded)			mm ²	1 ... 4	
flexible				1 ... 4	
Length of removed wire insulation		mm	7		
Screw			M3		
Screw head			PZ1		
Tightening torque		Nm	0.6		

Operation position



Dimension

