

**Deatures:**

- ❑ simple motor control with only a few elements
- ❑ motor contactor and DC-brake in a single device
- ❑ suitable for all asynchrnous motors
- ❑ controlled by microcontroller
- ❑ easy mounting, also for retrofitting into existing plants
- ❑ motor contactor with contact gap  $\geq 3\text{mm}$ , utilization category AC-3
- ❑ operator's controls physically separated from load (24V extra-low voltage)
- ❑ connection of several „STOP“ buttons possible
- ❑ for snap-mounting onto 35mm top-hat rail
- ❑ degree of protection IP 20
- ❑ meets trade assoc. requirements for category 2 acc. to GS-HO-01
- ❑ intermateable with BRMS



Combined Motor Start and Braking Devices VBMS ...

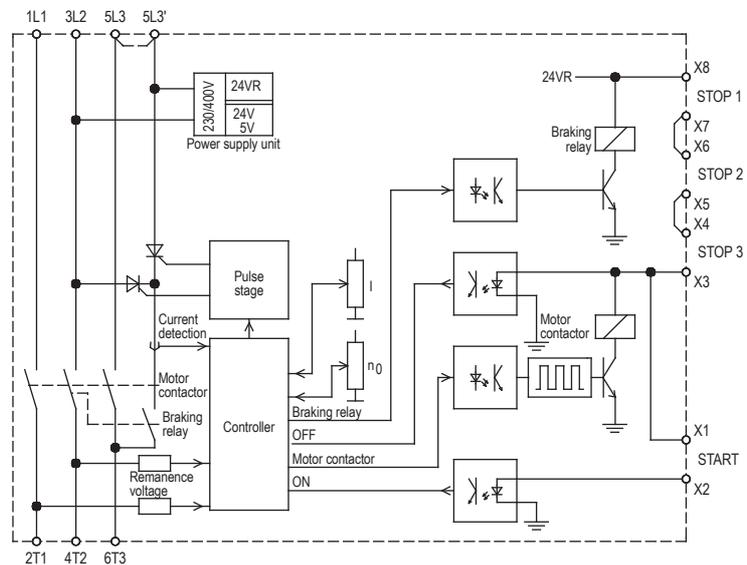


**Function:**

- ❑ direct online start via motor contactor
- ❑ DC braking
- ❑ control via buttons or via switch
- ❑ braking current infinitely adjustable
- ❑ standstill threshold adjustable
- ❑ braking current cutoff after motor standstill
- ❑ monitoring of braking frequency (overload protection)
- ❑ monitoring of exceeded braking time of 10s
- ❑ start interlock in case of safety relevant errors

**Typical Applications:**

- sawing machines
- centrifuges
- vibrators



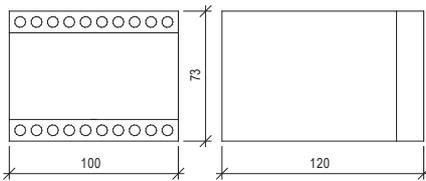
Type designation	VBMS 400-2,2/20	VBMS 230-1,5/20
AC-3 rated operational power	2,2kW	1,5kW
rated operatinal voltage 50/60Hz according to DIN EN 50160 (IEC 38)	3x 380/415V $\pm 10\%$	3x 200/240V $\pm 10\%$
order number	2C000.40020	2C000.23020

Technical data	VBMS 400-2,2/20	VBMS 230-1,5/20
rated operational voltage 50/60Hz according to DIN EN 50160 (IEC 38)	3x 380/415V ± 10%	3x 200/240V ± 10%
AC-3 rated operational power	2,2kW	1,5kW
conventional enclosed thermal current $I_{th} = I_e$ (valid for motor contactor)	16A	
braking current	2 ... 20A	
max. braking time	10s	
max. braking frequency at braking current 10A braking current 20A	at 5s braking time: 1 in 25s, at 10s braking time: 1 in 50s at 5s braking time: 1 in 60s, at 10s braking time: 1 in 120s	
delay time during switch-off and braking	500ms	
braking voltage	0 ... 220V DC	0 ... 110V DC
max. cross-sectional area	2,5mm <sup>2</sup> per terminal	
ambient / storage temperature	0°C ... 45°C / -25°C ... 75°C	
weight / kg	0,6	

**Note:**

Please pay attention and consider for the operation of IE3 motors while dimensioning of softstarters and dc brakes the resulting higher starting and braking currents.

For the use of IE3 motors we highly recommend to dimension and design the needed softstarters and braking devices one size higher.

**Dimensions:**

All dimensions indicated in mm.

**Connection Diagrams:**