

Variable speed drives for asynchronous motors

Altivar 11

Combinations for self-assembly

Function: to protect persons and equipment from any level of overcurrent which may be encountered (overload or short-circuit).

Standard power ratings of 3-phase 4-pole 50/60 Hz motors	Speed drive Reference (1)	Circuit-breaker			Contactor Reference	
		Telemecanique (2)	Adjustment range	Max. short-circuit current Icu		
		Merlin Gerin	Rating	A	kA	
kW						
M1	A1	Q1				KM1
Single-phase supply voltage: 100...120 V 50/60 Hz						
0.18	ATV 11HU05F1●	GV2 ●●14 DT40	6...10 10	> 100 6		LC1 D09 LC1 D09
0.37	ATV 11●U09F1●	GV2 ●●14 DT40	6...10 16	> 100 6		LC1 D12 LC1 D12
0.75	ATV 11HU18F1●	GV2 ●●21 DT40	17...23 20	50 6		LC1 D25 LC1 D25
Single-phase supply voltage: 200...240 V 50/60 Hz						
0.18	ATV 11HU05M2●	GV2 ●●08 DT40	2.5...4 6	> 100 6		LC1 D09 LC1 D09
0.37	ATV 11●U09M2●	GV2 ●●14 DT40	6...10 10	> 100 6		LC1 D09 LC1 D09
0.55	ATV 11●U12M2E	GV2 ●●14 DT40	6...10 10	> 100 6		LC1 D09 LC1 D09
0.75	ATV 11●U18M2●	GV2 ●●16 DT40	9...14 16	> 100 6		LC1 D12 LC1 D12
1.5	ATV 11HU29M2E	GV2 ●●20 DT40	13...18 20	50 6		LC1 D25 LC1 D25
1.5	ATV 11HU29M2U ATV 11HU29M2A	GV2 ●●21 DT40	17...23 20	50 6		LC1 D25 LC1 D25
2.2	ATV 11HU41M2●	GV2 ●●22 DT40	20...25 32	50 6		LC1 D32 LC1 D32
3-phase supply voltage: 200...230 V 50/60 Hz						
0.18	ATV 11HU05M3●	GV2 ●●07 DT40	1.6...2.5 6	> 100 6		LC1 D09 LC1 D09
0.37	ATV 11●U09M3●	GV2 ●●08 DT40	2.5...4 6	> 100 6		LC1 D09 LC1 D09
0.75	ATV 11●U18M3●	GV2 ●●14 DT40	6...10 10	> 100 6		LC1 D09 LC1 D09
1.5	ATV 11HU29M3●	GV2 ●●16 DT40	9...14 16	> 100 6		LC1 D12 LC1 D12
2.2	ATV 11HU41M3●	GV2 ●●20 DT40	13...18 20	50 6		LC1 D25 LC1 D25

Combinations of circuit-breakers and add-on modules

DT40	Vigi TG40		
Rating (A)	Rating (A)	Type (3)	Sensitivity
6	25	A "si"	30 mA
10	25	A "si"	30 mA
16	25	A "si"	30 mA
20	25	A "si"	30 mA
32	40	A "si"	30 mA

Recommendations for special uses:

■ All RH10 / RH21 / RH99 / RHU residual current protection devices with separate sensors are compatible as long as the type and sensitivity of the add-on modules given in the table above are observed.

■ It is advisable to connect one residual current differential safety device per drive. In this case a type B device must not be located downstream of a type A or AC device.

(1) Replace the dots in the reference according to the type of drive required, see pages 4 to 7.

(2) Replace the dots with ME for pushbutton control or with P for control via rotating knob.

Type 2 coordination is provided by combining a GV2 circuit breaker with an LC1 D●● contactor

(3) For additional protection against direct contact, the add-on module must be type B with a sensitivity of 30 mA, if the following conditions are met :

- 3-phase power supply, all neutral point connection systems and
- the braking resistor must be accessible.