

Utilisations of the RECTIVAR

Simplified sequence diagrams

Supply : 380/415V or 440V, 50/60Hz

180 to 650A speed controller with factory configuration

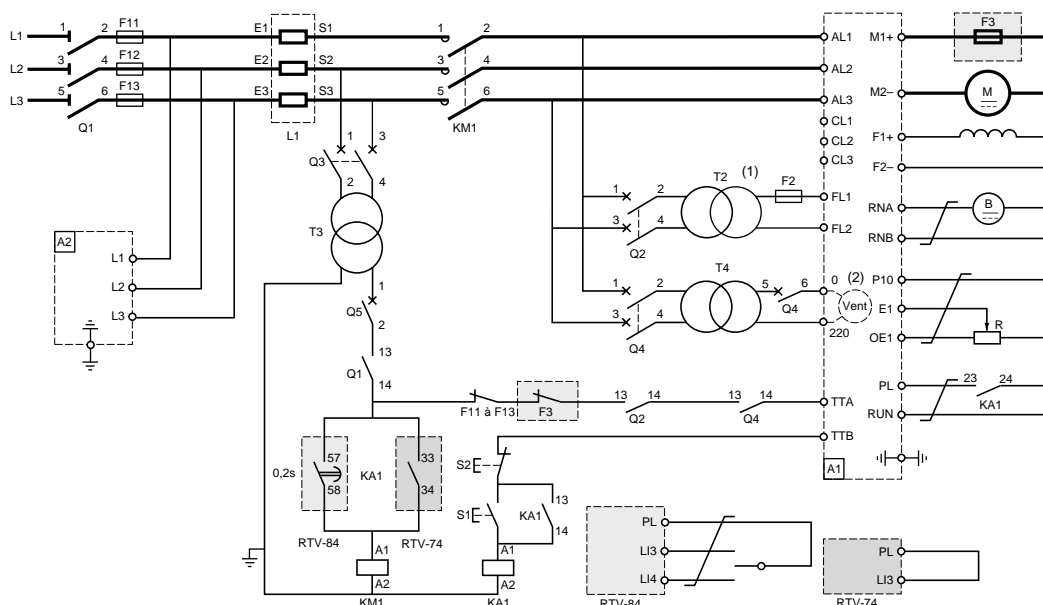
Recommended circuit diagram

For more complex sequences, see :

Assignable inputs/outputs

(Part 2 of the manual)

If power and control are separately supplied, connect VY1-RZD106 (A2) module directly to terminals CL1-CL2-CL3.



Note

- * connect the T2 or FL1-FL2 transformer between phases 1 and 3
- F2, T2 where appropriate, depending on the mains and excitation voltages
- ** Fan supplied separately for ratings > 270A.

Nomenclature of the required hardware

Reference code	Description	Reference	Reference	Reference	Reference
Maximum power with Td/Tn = 1,2 and armature voltage 440V / 400 V					
M	Motor	57kW	86kW	132kW / 120kW	214kW / 195kW
A1	Speed controller	RTV-74/84C18Q	RTV-74/84C27Q	RTV-74/84C40Q	RTV-74/84C65Q
A2	Filter module (3)	VY1-RZD106	VY1-RZD106	VY1-RZD106	VY1-RZD106
F2	Fuse	Rated at value of excitation current on cold			
	+ carrier	DF6-AB10	DF6-AB10	DF6-AB10	DF6-AB10
F3 (1)	Fuse (2)	DF3-NF25002	DF3-NF40002	DF3-NF50002	DF3-QF80002
KA1	Control relay	CA2-DN140MA65	CA2-DN140MA65	CA2-DN140MA65	CA2-DN140MA65
	+ time delay block (2)	LA3-D20A65	LA3-D20A65	LA3-D20A65	LA3-D20A65
KM1	Line contactor	LC1-FF43	LC1-FG43	LC1-FJ43	LC1-FK43
	+ coil	LX1-FF220	LX1-FG220	LX1-FJ220	LX1-FK220
L11-21-31	Line inductances	VZ1 L150 U170T	VZ1 L250 U100T	VZ1 L325 U075T	VZ1 L530 U045T
F11-12-13	+ fuses (1)	DF3-NF25002	DF3-NF40002	DF3-NF50002	DF3-QF80002
Q1	Isolator	DK1-HC2312	DK1-HC2312	DK1-KC2312	DK1-KC2312
Q2	Circuit breaker	GV1-M.. rated at twice the value of the primary T2 current on cold + GV1-A01			
Q3	Circuit breaker	GV1-M06	GV1-M07	GV1-M08	GV1-M08
Q4	Circuit breaker	-	-	GV1-M06 + GV1-A01	GV1-M06 + GV1-A01
Q5	Circuit breaker	GB2-CB06	GB2-CB10	GB2-CB10	GB2-CB10
R	Potentiometer	SZ1-RV1202	SZ1-RV1202	SZ1-RV1202	SZ1-RV1202
S1-S2	Contol	XB2-M or XB2-B units, as required			
T2	Transformer	≥ 440V mains, secondary 220V P (VA) = 1,5 P excitation (W) hot state motor.			
T3	Transformer	250VA	400VA	630VA	630VA
T4	Transformer	-	-	Secondary 220V P = 250VA	

(1) Quick blow fuses to be mounted on DF5 carriers (see page 1/21) or on busbars.

(2) For RTV84 only, unnecessary for the RTV74.

(3) The filter module is supplied with the speed controller.

Nota : if mains supply is other than 380/415V or 440V a.c., fit a three phase auto-transformer, 380V 50/60Hz secondary, power ≥ 40VA for ratings 400 and 650A and 250VA for ratings 180 and 270A, to supply the control (CL1-CL2-CL3).

** RTV-84C40. and C65. : fan supplied separately at 220V single phase, 250VA power.