

DRAF09 ... DRAF16 enclosed direct-on-line starters

Up to 7.5 kW and 10 hp, protected by thermal overload relays
AC operated



1SBK133005W0014

DRAF
+ TF42 to be ordered separately

Enclosed direct-on-line (DOL) starters are used for controlling 3-phase asynchronous motors up to 690 V AC.

Each starter is delivered assembled and wired. It contains:

- IP66 and type 4X plastic enclosure with double insulation, equipped with:
 - 1 green flush "I" ON button and 1 red protruding "O" OFF/RESET button
 - 4 cable inlets and outlets via knockouts.
- 1 AF 3-pole contactor with holding contact
- 1 CB5-10 start contact block
- 1 PE and 1 neutral terminal.

Control supply wiring:

IEC starters type: phase-to-phase, separate supply or phase-to-neutral.
UL starters type: separate supply.

TF42 thermal overload relay to be ordered separately and chosen according to motor's nominal current (see table in the next page).

DRAF enclosed DOL starters

IEC - AC-3					Control supply wiring	Rated control circuit voltage Uc min ... Uc max (1)	Type	Order code	Weight Pkg (1 pce) kg
Rated operational power		max. current							
220 V	380 V	500 V	690 V	current					
230 V	400 V				$\theta \leq 40^\circ\text{C}$				
240 V					Ue=400 V				
kW	kW	kW	kW	A	V 50/60 Hz				

IEC starters type

2.2	4	5.5	5.5	9	Control supply wiring		Type	Order code	Weight kg
					Separate supply	Phase-to-neutral			
					Phase-to-phase	250...500	DRAF09-14P	1SBK134037R1400	0.820
3	5.5	7.5	7.5	12	Separate supply	24...60	DRAF12-11S	1SBK154237R1100	0.820
					Phase-to-neutral	100...250	DRAF12-13N	1SBK154137R1300	0.820
					Phase-to-phase	250...500	DRAF12-14P	1SBK154037R1400	0.820
4	7.5	9	9	18	Separate supply	24...60	DRAF16-11S	1SBK174237R1100	0.820
					Phase-to-neutral	100...250	DRAF16-13N	1SBK174137R1300	0.820
					Phase-to-phase	250...500	DRAF16-14P	1SBK174037R1400	0.820

(1) Select DRAF..S with separate supply for 24...60 V DC control circuit voltage (change A2 - Us wire to blue color acc. to IEC 60947-4-1).

UL starter type with separate control supply wiring

UL / CSA						Rated control circuit voltage Uc min ... Uc max	Type	Order code	Weight Pkg (1 pce) kg
Horse power ratings		Three phase motor							
Single phase motor		200 V	220 V	440 V	550 V				
120 V	240 V	208 V	240 V	480 V	600 V				
hp	hp	hp	hp	hp	hp	V 50/60 Hz			

UL starters type

0.75	1.5	2	2	5	7.5	Control supply wiring		Type	Order code	Weight kg
						Separate supply	Phase-to-neutral			
						Phase-to-phase	250...500	DRAF09-14U	1SBK134238R1400	0.820
1	2	3	3	7.5	10	Separate supply	24...60	DRAF12-11U	1SBK154238R1100	0.820
						Phase-to-neutral	100...250	DRAF12-13U	1SBK154238R1300	0.820
						Phase-to-phase	250...500	DRAF12-14U	1SBK154238R1400	0.820
1.5	3	5	5	10	15	Separate supply	24...60	DRAF16-11U	1SBK174238R1100	0.820
						Phase-to-neutral	100...250	DRAF16-13U	1SBK174238R1300	0.820
						Phase-to-phase	250...500	DRAF16-14U	1SBK174238R1400	0.820