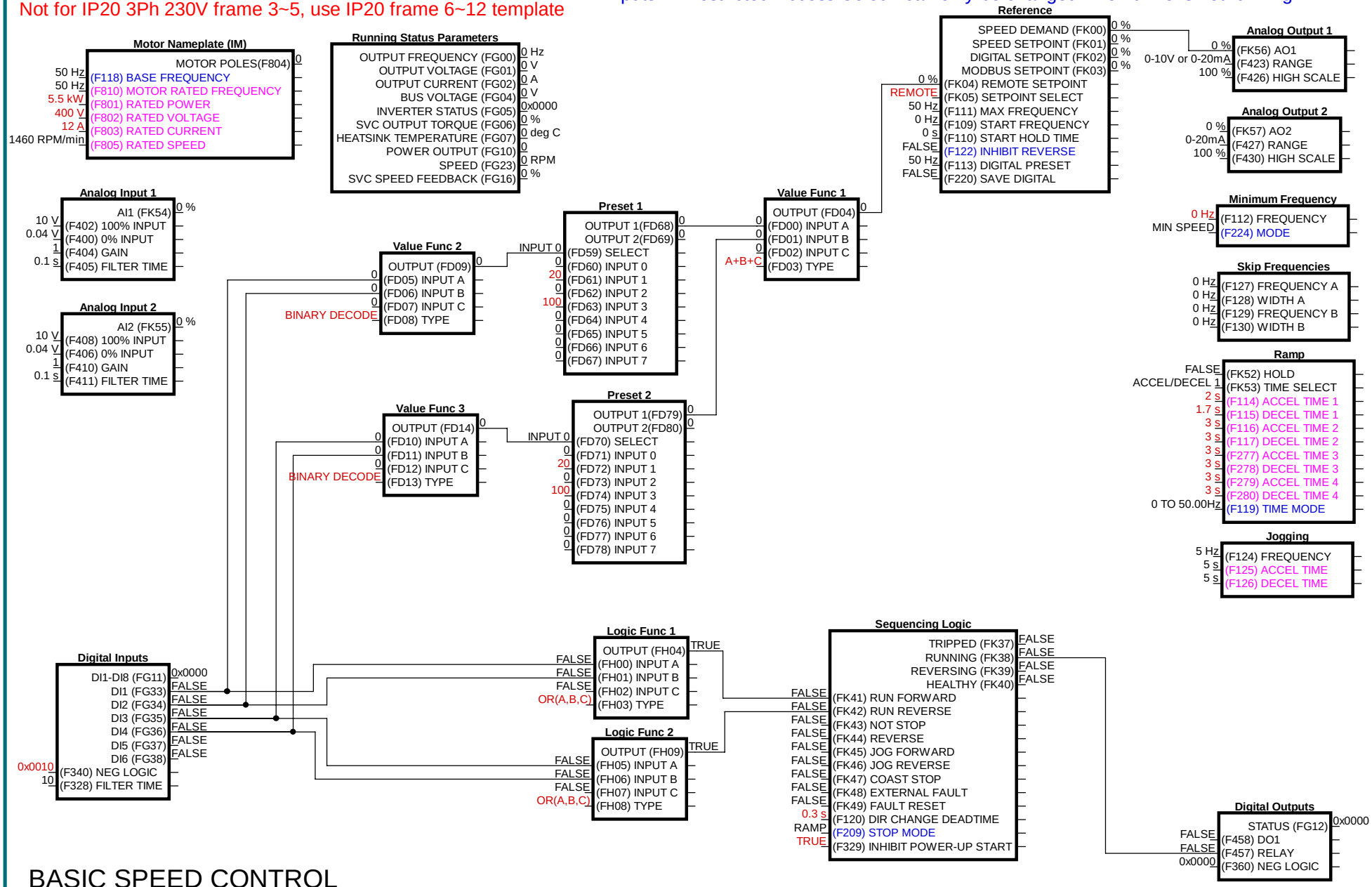
AC10

IP20 frame 1~2 (0.2kW~2.2kW)

Not for IP20 3Ph 230V frame 3~5, use IP20 frame 6~12 template

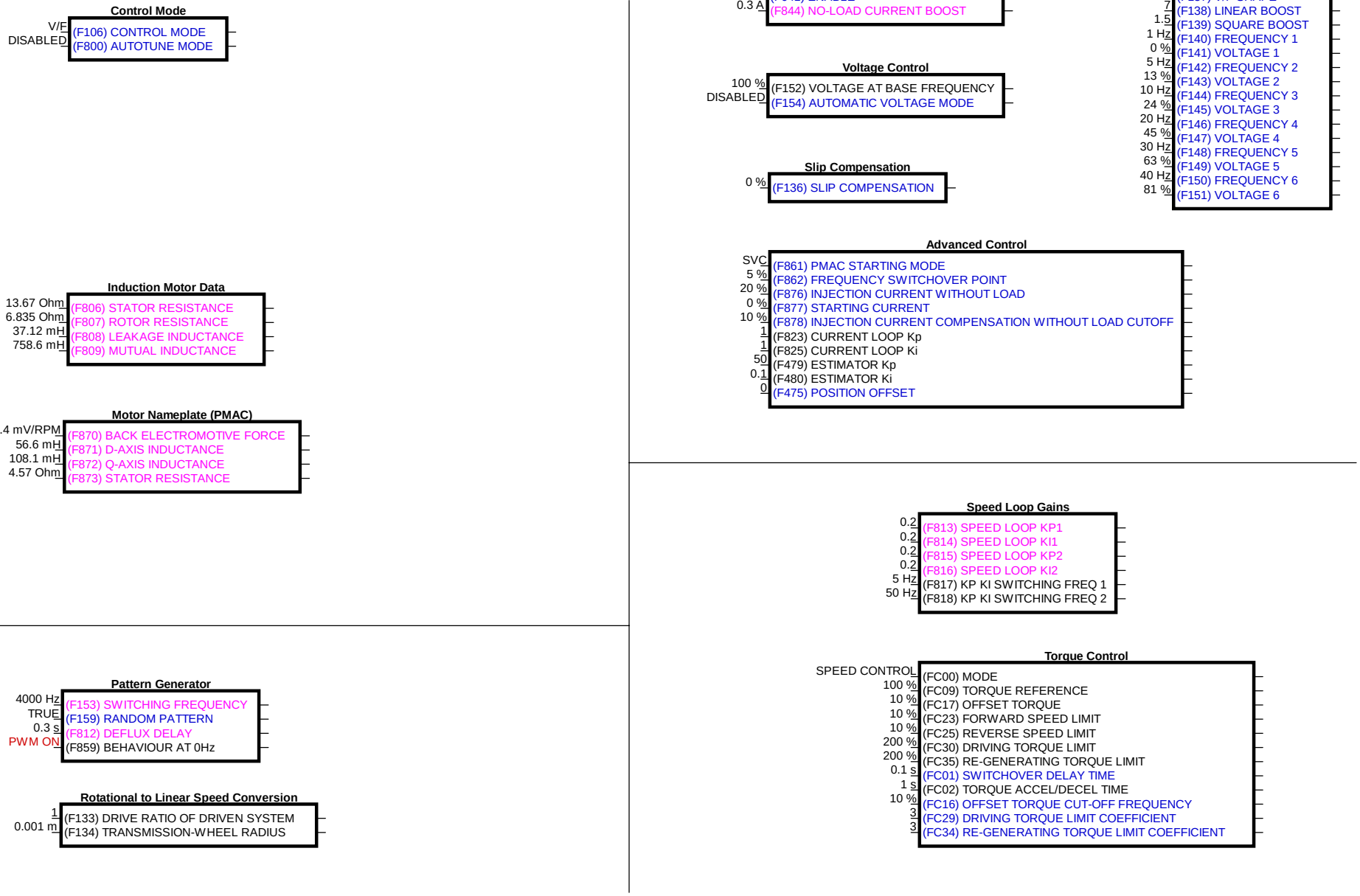
Inputs in 'Frame Dependent Colour' are frame dependent, see manual for details.
Inputs in 'Restricted Access Colour' can only be changed when drive is not running.



BASIC SPEED CONTROL

	DWN			SIZE A	DWG. NO. RFA
	CHK		/2/motyl.018	ISSUE	
	APP			SCALE	SHEET 1 OF 6
	EDIT	LOC			

Motor Control



	DWN			SIZE A	DWG. NO. RFA
	CHK		/2/motyl.018	ISSUE	
	APP			SCALE	SHEET 2 OF 6
	EDIT	LOC			

Trips and Protection

Fault History

[NEWEST] FAULT 1 (F708)	NONE
FREQUENCY 1 (F711)	0 Hz
CURRENT 1 (F712)	0 A
VOLTAGE 1 (F713)	0 V
FAULT 2 (F709)	NONE
FREQUENCY 2 (F714)	0 Hz
CURRENT 2 (F715)	0 A
VOLTAGE 2 (F716)	0 V
[OLDEST] FAULT 3 (F710)	NONE
FREQUENCY 3 (F717)	0 Hz
CURRENT 3 (F718)	0 A
VOLTAGE 3 (F719)	0 V
OVER CURRENT COUNT (F720)	0
OVER CURRENT 1 COUNT (F739)	0
OVER VOLTAGE COUNT (F721)	0
OVER TEMPERATURE COUNT (F722)	0
OVERLOAD COUNT (F723)	0

V/Hz Protection

VOLTAGE AND CURRENT	(F607) PROTECTION MODE
160 %	(F608) CURRENT LIMIT
130 %	(F609) VOLTAGE LIMIT
60 s	(F610) PROTECTION TIMEOUT

Current Limit SVC

2	(F822) CURRENT LIMIT

Overcurrent 1 Protection

TRUE	(F737) ENABLE TRIP
2.5	(F738) TRIP LEVEL

Motor Overload Protection

MODE 1	(F753) MODE
80 %	(F705) WARNING TIME
100 %	(F707) CURRENT LEVEL
60	(F750) MAX TIME

Inverter Overload Protection

80 %	(F704) WARNING TIME
150 %	(F706) CURRENT LEVEL

Analog Input Break Protection

DISABLED	(F741) MODE
50 %	(F742) TRIP THRESHOLD

Input Phase Loss Protection

TRUE	(F724) ENABLE TRIP
0.5 s	(F728) FILTERING TIME CONSTANT

Output Phase Loss Protection

FALSE	(F727) ENABLE TRIP

Under Voltage Protection

200 V	(F732) TRIP THRESHOLD
5 s	(F729) FILTERING TIME CONSTANT

Over Temperature Protection

TRUE	(F726) ENABLE TRIP
5 s	(F730) FILTERING TIME CONSTANT
80 %	(F745) WARNING THRESHOLD
TRUE	(F747) AUTO-ADJUST SWITCHING FREQ
RUNNING STATE	(F702) FAN CONTROL

Auxiliary Functions

DC Braking

	BRAKING THRESHOLD (F611)	0 V
DISABLED	(F600) MODE	
1 Hz	(F601) INITIAL FREQUENCY	
10 %	(F602) STARTING EFFICIENCY	
10 %	(F603) STOPPING EFFICIENCY	
0.5 s	(F604) STARTING TIME	
0.5 s	(F605) STOPPING TIME	
80 %	(F612) BRAKING DUTY RATIO	
TRUE	(F622) AUTO DUTY RATIO	

Flycatching

DISABLED	(F613) FUNCTION
FROM MAX FREQUENCY	(F614) MODE
20	(F615) RATE
60 s	(F619) FAULT TIMEOUT
100	(F627) CURRENT LIMITING

Auto-Start

FALSE	(F213) AFTER REPOWERED
FALSE	(F214) AFTER FAULT RESET
60 s	(F215) START DELAY TIME
0	(F216) MAX RETRIES
3 s	(F217) RESET DELAY TIME

VDC Adjustment

DISABLED	(F631) MODE
380 V	(F632) TARGET VOLTAGE

High-Frequency Performance

MODE 1	(F650) MODE
100	(F651) ENABLE FREQUENCY
95	(F652) DISABLE FREQUENCY

	DWN			SIZE A	DWG. NO. RFA
	CHK		/2/motyl.018	ISSUE	
	APP			SCALE	SHEET 3 OF 6
	EDIT	LOC			

Multi-stage Speed Control

Multi-Stage Speed Control

	OUTPUT (FK50)	0 %
NONE	(FK51) STAGE SELECT	
15 STAGE	(F500) TYPE	
5 Hz	(F504) FREQUENCY 1	
FORWARD	(F549) DIRECTION 1	
3 s	(F519) ACCEL TIME 1	
2 s	(F534) DECEL TIME 1	
10 Hz	(F505) FREQUENCY 2	
FORWARD	(F550) DIRECTION 2	
3 s	(F520) ACCEL TIME 2	
2 s	(F535) DECEL TIME 2	
15 Hz	(F506) FREQUENCY 3	
FORWARD	(F551) DIRECTION 3	
3 s	(F521) ACCEL TIME 3	
2 s	(F536) DECEL TIME 3	
20 Hz	(F507) FREQUENCY 4	
FORWARD	(F552) DIRECTION 4	
3 s	(F522) ACCEL TIME 4	
2 s	(F537) DECEL TIME 4	
25 Hz	(F508) FREQUENCY 5	
FORWARD	(F553) DIRECTION 5	
3 s	(F523) ACCEL TIME 5	
2 s	(F538) DECEL TIME 5	
30 Hz	(F509) FREQUENCY 6	
FORWARD	(F554) DIRECTION 6	
3 s	(F524) ACCEL TIME 6	
2 s	(F539) DECEL TIME 6	
35 Hz	(F510) FREQUENCY 7	
FORWARD	(F555) DIRECTION 7	
3 s	(F525) ACCEL TIME 7	
2 s	(F540) DECEL TIME 7	
40 Hz	(F511) FREQUENCY 8	
FORWARD	(F556) DIRECTION 8	
3 s	(F526) ACCEL TIME 8	
2 s	(F541) DECEL TIME 8	
5 Hz	(F512) FREQUENCY 9	
FORWARD	(F573) DIRECTION 9	
3 s	(F527) ACCEL TIME 9	
2 s	(F542) DECEL TIME 9	
10 Hz	(F513) FREQUENCY 10	
FORWARD	(F574) DIRECTION 10	
3 s	(F528) ACCEL TIME 10	
2 s	(F543) DECEL TIME 10	
15 Hz	(F514) FREQUENCY 11	
FORWARD	(F575) DIRECTION 11	
3 s	(F529) ACCEL TIME 11	
2 s	(F544) DECEL TIME 11	
20 Hz	(F515) FREQUENCY 12	
FORWARD	(F576) DIRECTION 12	
3 s	(F530) ACCEL TIME 12	
2 s	(F545) DECEL TIME 12	
25 Hz	(F516) FREQUENCY 13	
FORWARD	(F577) DIRECTION 13	
3 s	(F531) ACCEL TIME 13	
2 s	(F546) DECEL TIME 13	
30 Hz	(F517) FREQUENCY 14	
FORWARD	(F578) DIRECTION 14	
3 s	(F532) ACCEL TIME 14	
2 s	(F547) DECEL TIME 14	
35 Hz	(F518) FREQUENCY 15	
FORWARD	(F579) DIRECTION 15	
3 s	(F533) ACCEL TIME 15	
2 s	(F548) DECEL TIME 15	

Multi-Stage Auto Circulate

7	(F501) STAGES
0	(F502) CYCLES
FALSE	(F503) KEEP RUNNING
1 s	(F557) RUNNING TIME 1
0 s	(F565) STOP TIME 1
1 s	(F558) RUNNING TIME 2
0 s	(F566) STOP TIME 2
1 s	(F559) RUNNING TIME 3
0 s	(F567) STOP TIME 3
1 s	(F560) RUNNING TIME 4
0 s	(F568) STOP TIME 4
1 s	(F561) RUNNING TIME 5
0 s	(F569) STOP TIME 5
1 s	(F562) RUNNING TIME 6
0 s	(F570) STOP TIME 6
1 s	(F563) RUNNING TIME 7
0 s	(F571) STOP TIME 7
1 s	(F564) RUNNING TIME 8
0 s	(F572) STOP TIME 8

Other

Raise/Lower

	OUTPUT (FK28)	0 %
FALSE	(FK29) RAISE	
FALSE	(FK30) LOWER	
FALSE	(FK31) RESET	
10 s	(FK32) RAMP TIME	
100 %	(FK33) MAX VALUE	
0 %	(FK34) MIN VALUE	
0 %	(FK35) RESET VALUE	

PID

	OUTPUT (FK10)	0 %
	ERROR (FK11)	0 %
	LIMITING (FK12)	FALSE
0 %	(FK13) SETPOINT	
0 %	(FK14) FEEDBACK	
0 %	(FK15) FEED FORWARD	
1	(FK16) FEEDBACK GAIN	
0	(FK17) FEED FORWARD GAIN	
0.1	(FK18) P GAIN	
1	(FK19) I GAIN	
0	(FK20) D GAIN	
300 %	(FK21) LIMIT	
-300 %	(FK22) LOW LIMIT	
TRUE	(FK23) SYMMETRIC LIMITS	
FALSE	(FK24) ENABLE PID	
FALSE	(FK25) INTEGRAL DEFEAT	
0.05 s	(FK26) D FILTER TC	
1	(FK27) OUTPUT SCALING	

Analog Input 1 Scaling

	AI1 RAW (F331)	0 %
2	(F403) HIGH SCALE	
1	(F401) LOW SCALE	
0 V	(F418) ZERO DEADZONE	
STRAIGHT LINE	(F460) LINEARISATION	
2 V	(F462) VOLTAGE 1	
1.2	(F463) SCALE 1	
5 V	(F464) VOLTAGE 2	
1.5	(F465) SCALE 2	
8 V	(F466) VOLTAGE 3	
1.8	(F467) SCALE 3	

Analog Input 2 Scaling

	AI2 RAW (F332)	0 %
2	(F409) HIGH SCALE	
1	(F407) LOW SCALE	
0 V	(F419) ZERO DEADZONE	
STRAIGHT LINE	(F461) LINEARISATION	
2 V	(F468) VOLTAGE 1	
1.2	(F469) SCALE 1	
5 V	(F470) VOLTAGE 2	
1.5	(F471) SCALE 2	
8 V	(F472) VOLTAGE 3	
1.8	(F473) SCALE 3	

Analog Input Filter

10	(F437) WIDTH

Keypad

0x000F	(F131) RUN DISPLAY ITEMS
0x0006	(F132) STOP DISPLAY ITEMS
DISABLED	(F643) MULTI-FUNCTION KEY
100 s	(F646) BACKLIGHT TIME
REMOTE IF FITTED	(F421) SELECT

Modbus

	ACTIVITY (F908)	0
0 s	(F905) TIMEOUT	
TRUE	(F219) DISABLE SAVE	

Password

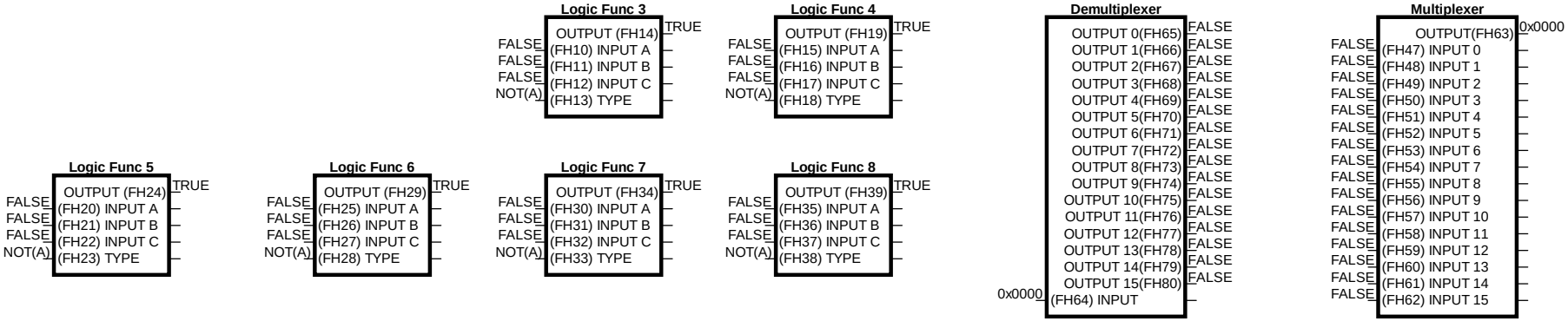
FALSE	(F107) ENABLE
8	(F108) SET

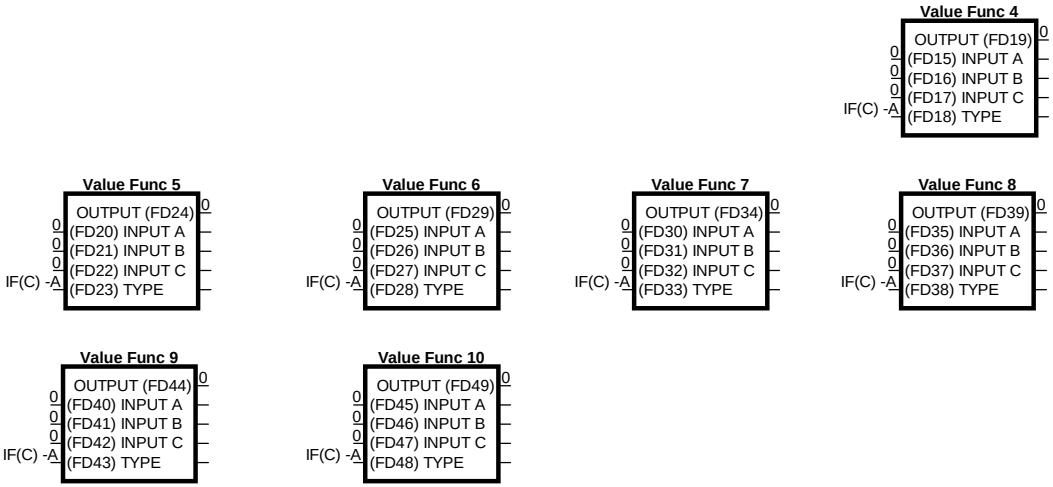
Clone

	CODE (F639)	0
SAME ONLY	(F638) LOAD ALLOW	
TRUE	(F640) EXCLUDE MOTOR PARAMS	

	DWN			SIZE A	DWG. NO. RFA
	CHK		/2/motyl.018	ISSUE	
	APP			SCALE	SHEET 4 OF 6
	EDIT	LOC			

General Purpose Blocks

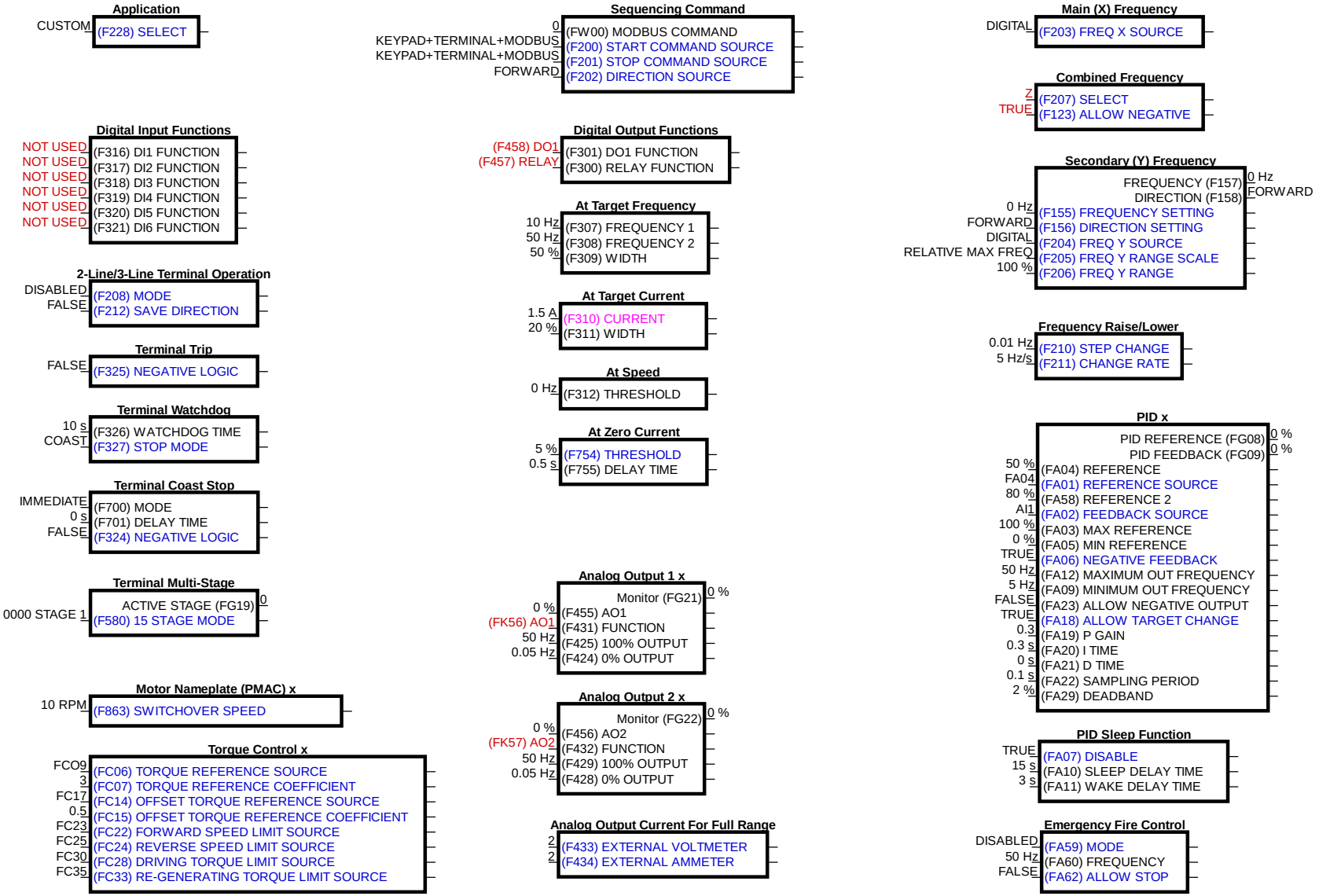




	DWN			SIZE A	DWG. NO. RFA
	CHK		/2/motyl.018	ISSUE	
	APP			SCALE	SHEET 5 OF 6
	EDIT	LOC			

Deprecated Blocks

Avoid using theses blocks, their functionality has been superseded and only are included in order to provide backward compatibility.



	DWN			SIZE A	DWG. NO. RFA
	CHK		/2/motyl.018	ISSUE	
	APP			SCALE	SHEET 6 OF 6
	EDIT	LOC			