

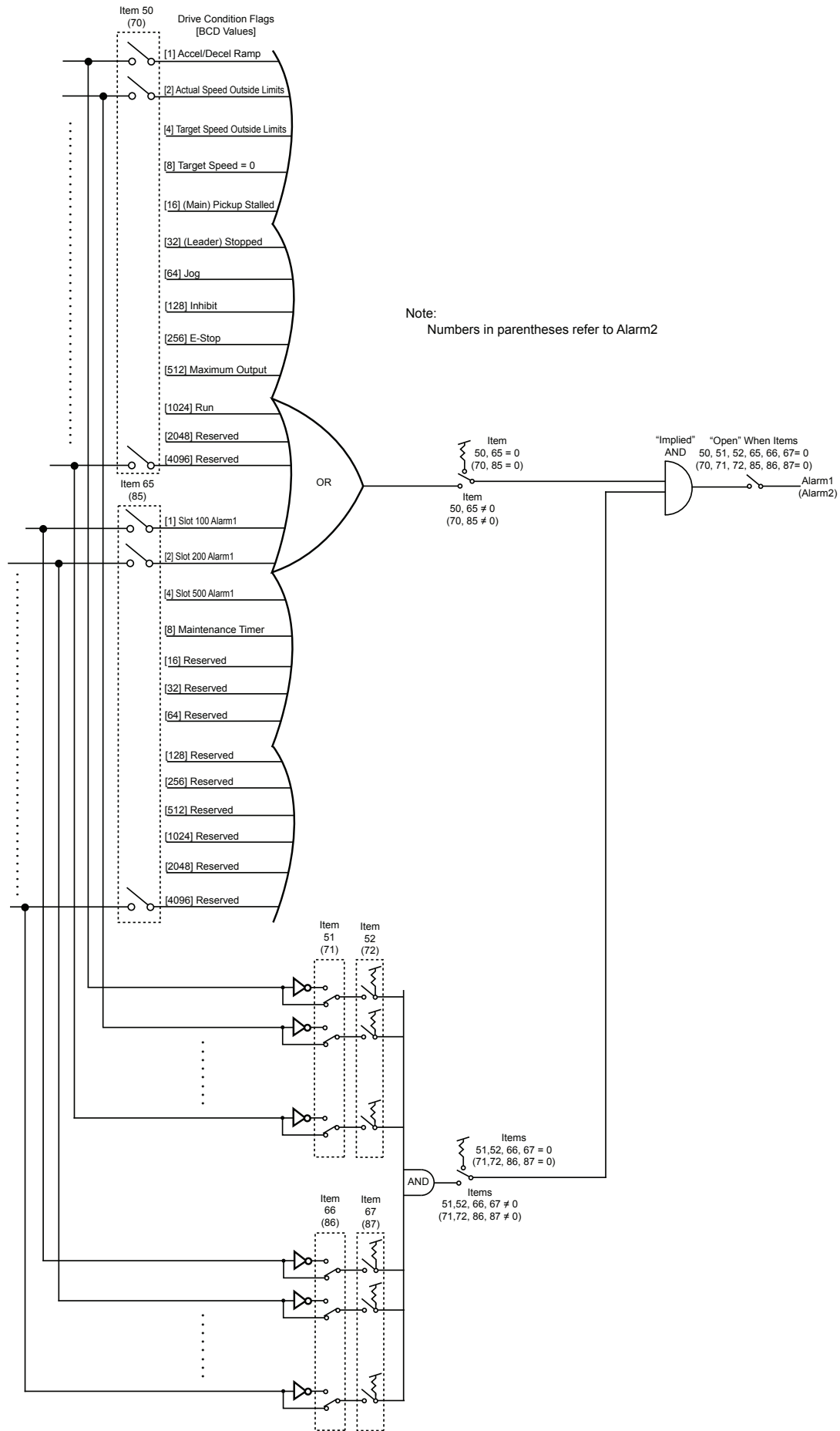
Attention: A software upgrade has occurred. The changes & features are included in this addendum.

Table1: BCD Values for Drive Condition “Flags”

BCD Value	Description
0	(No Flags are currently Active)
1	Accel/Decel Ramp In Progress
2	S1 (Main) Actual Speed (Tach) is Outside Alarm Limits
4	Target Speed is Outside Alarm Limits
8	Target Speed = 0
16	S1 (Main) Pickup is Stalled
32	S2 (Leader) Pickup is Stopped (Valid only in ‘Follower’ Mode)
64	Jog Function is Activated
128	Inhibit Function is Activated
256	E-Stop Function is Activated
512	Drive is at Maximum Output
1024	“Run” Condition
2048	Reserved
4096	Reserved

Table2: BCD Values for Drive Condition “Flags”

	Description
0	(No Flags are currently Active)
1	Slot 100 Alarm1 Activated (Valid only if ModularBus card installed in this slot)
2	Slot 200 Alarm1 Activated (Valid only if ModularBus card installed in this slot)
4	Slot 500 Alarm1 Activated (Valid only if ModularBus card installed in this slot)
8	Maintenance Timer
16	Reserved
32	Reserved
64	Reserved
128	Reserved
256	Reserved
512	Reserved
1024	Reserved
2048	Reserved
4096	Reserved



Software Parameters (Items)

Item	Description	Value Range	Units	Factory Default	User Setting
8	Drive Condition Flags	(See "Flags" Table 1)	BCD	n/a	n/a
9	Drive Condition Flags	(See "Flags" Table 2)	BCD	n/a	n/a
Alarm Output #1 Setup Items					
50	Alarm1 Logical "OR" Activation Conditions	(See "Flags" Table 1)	BCD	0	
51	Alarm1 Logical Inverters	(See "Flags" Table 1)	BCD	0	
52	Alarm1 Logical "AND" Activation Conditions	(See "Flags" Table 1)	BCD	0	
Alarm Output #2 Setup Items					
65	Alarm1 Logical "OR" Activation Conditions	(See "Flags" Table 2)	BCD	0	
66	Alarm1 Logical Inverters	(See "Flags" Table 2)	BCD	0	
67	Alarm1 Logical "AND" Activation Conditions	(See "Flags" Table 2)	BCD	0	
Maintenance Timer Setup Items					
100	Activate Maintenance Message after this amount of time	0 = Off 1 = 1 - 9999	(in hours)	0	
101	Reset Maintenance Timer	0 = Do Nothing & Exit 5 = Reset	—	0	n/a
102	Current Value of Maintenance Timer	(Read Only)	(in hours)	0	n/a
103	Scale Timer	0 = Disabled 1 – 9999 = Scale Factor	—	0	
120	Auto/Manual Slot Control	0 = Slot 100 (Not Available) 1 = Slot 200 2 = Slot 500	—	1	

Item (Parameter) Descriptions

Item 8 – Drive Condition Flags (Read Only)

This is a Binary Coded Decimal ("BCD") representation of the currently active "Flags" representing certain real-time conditions and/or modes in which the drive is operating. This display is updated several times per second to reflect the up-to-the-second status of the drive and its ModularBus cards, if any. See Tables 1 & 2 for the BCD values.

Item 9 – Drive Condition Flags, Table 2 (Read Only)

This is a Binary Coded Decimal ("BCD") representation of the currently active "Flags" representing certain real-time conditions and/or modes in which the drive is operating. This display is updated several times per second to reflect the up-to-the-second status of the drive and its ModularBus cards, if any. See Tables 1 & 2 for the BCD values.

Item 50 – Alarm 1 Logical "OR" Activation Conditions (Flags Table 1)

This Item, in conjunction with Items 51 & 52, defines which conditions will result in the Alarm 1 output being activated. The function is that of a Logical "OR"ing of the selected Drive Condition Flags. A setting of zero defeats this "OR" function entirely. Please see the sections "Setting and Reading Softswitches" and "Setting Alarm Conditions" in the manual for further details.

Item 51 – Alarm 1 Logical Activation Condition Inverters (Flags Table 1)

This Item, in conjunction with Items 50 & 52, defines which conditions will result in the Alarm 1 output being activated. The function allows selected Drive Condition Flags to be "inverted" before being presented to the "inputs" of the "AND" function (see Item 52). Please see the sections "Setting and Reading Softswitches" and "Setting Alarm Conditions" in the manual for further details.

Item 52 – Alarm 1 Logical "AND" Activation Conditions (Flags Table 1)

This Item, in conjunction with Items 50 & 51, defines which conditions will result in the Alarm 1 output being activated. The function is that of a Logical "AND"ing of the selected Drive Condition Flags. A setting of zero defeats this "AND" function entirely. Please see the sections "Setting and Reading Softswitches" and "Setting Alarm Conditions" in the manual for further details.

Item 65 – Alarm 1 Logical “OR” Activation Conditions (Flags Table 2)

This Item, in conjunction with Items 66 & 67, defines which conditions will result in the Alarm 1 output being activated. The function is that of a Logical “OR”ing of the selected Drive Condition Flags Table 2. A setting of zero defeats this “OR” function entirely. Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 66 – Alarm 1 Logical Activation Condition Inverters (Flags Table 2)

This Item, in conjunction with Items 65 & 67, defines which conditions will result in the Alarm 1 output being activated. The function allows selected Drive Condition Flags Table 2 to be “inverted” before being presented to the “inputs” of the “AND” function (see Item 67). Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 67 – Alarm 1 Logical “AND” Activation Conditions (Flags Table 2)

This Item, in conjunction with Items 65 & 66, defines which conditions will result in the Alarm 1 output being activated. The function is that of a Logical “AND”ing of the selected Drive Condition Flags Table 2. A setting of zero defeats this “AND” function entirely. Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 70 – Alarm 2 Logical “OR” Activation Conditions (Flags Table 1)

This Item, in conjunction with Items 71 & 72, defines which conditions will result in the Alarm 2 output being activated. The function is that of a Logical “OR”ing of the selected Drive Condition Flags. A setting of zero defeats this “OR” function entirely. Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 71 – Alarm 2 Logical Activation Condition Inverters (Flags Table 1)

This Item, in conjunction with Items 70 & 72, defines which conditions will result in the Alarm 2 output being activated. The function allows selected Drive Condition Flags to be “inverted” before being presented to the “inputs” of the “AND” function (see Item 72). Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 72 – Alarm 2 Logical “AND” Activation Conditions (Flags Table 1)

This Item, in conjunction with Items 70 & 71, defines which conditions will result in the Alarm 2 output being activated. The function is that of a Logical “AND”ing of the selected Drive Condition Flags. A setting of zero defeats this “AND” function entirely. Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 85 – Alarm 2 Logical “OR” Activation Conditions (Flags Table 2)

This Item, in conjunction with Items 86 & 87, defines which conditions will result in the Alarm 2 output being activated. The function is that of a Logical “OR”ing of the selected Drive Condition Flags Table 2. A setting of zero defeats this “OR” function entirely. Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 86 – Alarm 2 Logical Activation Condition Inverters (Flags Table 2)

This Item, in conjunction with Items 85 & 87, defines which conditions will result in the Alarm 2 output being activated. The function allows selected Drive Condition Flags Table 2 to be “inverted” before being presented to the “inputs” of the “AND” function (see Item 87). Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 87 – Alarm 2 Logical “AND” Activation Conditions (Flags Table 2)

This Item, in conjunction with Items 85 & 86, defines which conditions will result in the Alarm 2 output being activated. The function is that of a Logical “AND”ing of the selected Drive Condition Flags Table 2. A setting of zero defeats this “AND” function entirely. Please see the sections “Setting and Reading Softswitches” and “Setting Alarm Conditions” in the manual for further details.

Item 100 – Maintenance Timer ON/OFF

This item is used to turn on/off the maintenance timer and setting the length of time before the timer will trip. By setting this item to 0, the timer is disabled. By setting this item to a value of greater than 0, indicates the time (in hours) when the maintenance timer will trip. The display will show " \overline{M} \overline{H} \overline{r} " when the maintenance timer has exceeded it's set time (Item 100).

Item 101 – Reset Maintenance Timer

When the maintenance timer has reached its time limit, this item is used to reset the timer and start the timer from zero by setting this item to a value of 5.

Item 102 – Current Time (In Hours)

This displays the current time in hours that the unit has been running.

Item 103 – Timer Scaler

This option can be used to extend the maintenance time of the device when the system is not working as hard as it could. Scaling allows the timer to be scaled when the motor is running below a pre-set value. If the value is set to 0, then the scaler is disabled. The timer will be scaled from 0 to 100% based on the speed from 0 to the value placed in Item 103. When the motor speed is at or above the pre-set value, the timer will be incremented at a 1:1 ratio (100% or one hour for each hour). If the motor is running below the pre-set value, then the overall percentage that the motor is running with respect to the pre-set value, will be used as the percentage when accumulating the time.

Example: Item 103 set for 1600, motor is running at 800 RPM (50% of Item 103), then every 2 hours that the motor is running at 800 RPM will be 1 hour added to the maintenance timer.

Item 120 – Auto/Manual Slot Control

This setting determines what slot controls the Auto setting when switched to the Auto Mode. Power must be cycled Off/On after selection changes and Item 81 must match same slot selection.