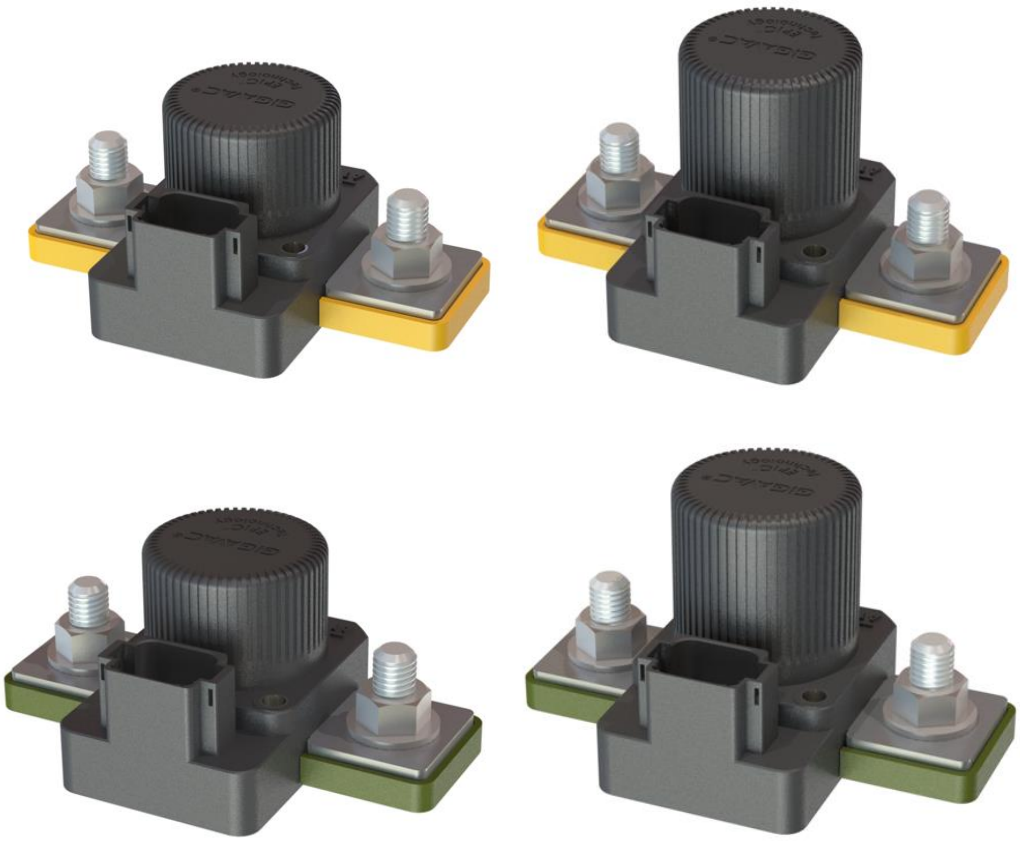
MXC/GXC Smart-Tactors

CAN-Bus Contactor Series



USER MANUAL

Message Summary

	Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address	Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
COMMANDS													
Contactor Command	6	00	177	this unit	user unit	-	-	-	-	-	-	-	Control (bits)
SETTINGS													
Trip Current Setting	6	00	178	this unit	user unit	-	-	Overcurrent Trip High		Overcurrent Trip Mid		Overcurrent Trip Low	
Trip Time Setting	6	00	179	this unit	user unit	Off Delay Period		Overcurrent Trip Delay Time High		Overcurrent Trip Delay Time Mid		Overcurrent Trip Delay Time Low	
Misc. Settings	6	00	180	this unit	user unit	-	Settings (bits)	Baud Rate	Report Period	Low Coil Voltage shutoff		Over Voltage Protection Limit	
REPORTS													
Status Report 1	7	00	181	255	this unit	Countdown to Trip Timer		Status (bits)	Ctrl Voltage		Temp-erature	Current	
Status Report 2	7	00	182	255	this unit	-	Total Cycle count			Terminal A1- Voltage		Terminal A2+ Voltage	
- Status Report 3	7	00	183	255	this unit	Over Voltage Trip Count		Low Voltage Trip Count		Hardware version		Firmware version	
Status Report 4	7	00	184	255	this unit	-	-	Overcurrent Trip High		Overcurrent Trip Mid		Overcurrent Trip Low	
Status Report 5	7	00	185	255	this unit	Off Delay Period		Overcurrent Trip Delay Time High		Overcurrent Trip Delay Time Mid		Overcurrent Trip Delay Time Low	
Status Report 6	7	00	186	255	this unit	-	Settings (bits)	Baud Rate	Report Period	Low Coil Voltage shutoff		Over Voltage Protection Limit	
Status Report 7	7	00	187	255	this unit	Minimum Voltage		Peak Voltage		Peak Current Negative		Peak Current Positive	
Status Report 8	7	00	188	255	this unit	Min. Temp.	Max Temp.	Current Trip High Counts		Current Trip Mid Counts		Current Trip Low Counts	

Command: Contactor Command

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address	Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
6	00	177	this unit	user unit	-	-	-	-	-	-	-	Control

Byte 0 – Control bits

Bit 0 1 = Set contactor closed
Bit 1 – Bit 7 Un-implemented. Set to 0.
Byte 1 – Byte 7 Un-implemented. Set to 0.

Setting: Trip Current Setting

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
6	00	178	this unit	user unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
-	-	Overcurrent Trip High		Overcurrent Trip Mid		Overcurrent Trip Low	

Byte 0/1 – Overcurrent Trip Low

Function: Sets the lowest current (absolute value) trip point. Uses "Overcurrent Trip Delay Time Low" for timing

Unused = 0

Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Overcurrent Trip Low	-32768 to 32767	16 Bits	1	Amps	0	Signed	Set Value = 1 (1 x 1) - 0 = 1 Amp Set Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 2/3 – Overcurrent Trip Mid

Function: Sets the middle current (absolute value) trip point. Uses "Overcurrent Trip Delay Time Mid" for timing

Value less than Overcurrent Trip Low = Defaults to Overcurrent Trip Low

Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Overcurrent Trip Mid	-32768 to 32767	16 Bits	1	Amps	0	Signed	Set Value = 1 (1 x 1) - 0 = 1 Amp Set Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 4/5 – Overcurrent Trip High

Function: Sets the High current (absolute value) trip point. Uses "Overcurrent Trip Delay Time High" for timing

Value less than Overcurrent Trip Mid = Defaults to Overcurrent Trip Mid

Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Overcurrent Trip High	-32768 to 32767	16 Bits	1	Amps	0	Signed	Set Value = 1 (1 x 1) - 0 = 1 Amp Set Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 6 – Byte 7 Un-implemented. Set to 0.

Setting: Trip Time Setting

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
6	00	179	this unit	user unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
Off Delay Period		Overcurrent Trip Delay Time High		Overcurrent Trip Delay Time Mid		Overcurrent Trip Delay Time Low	

Byte 0/1 – Overcurrent Trip Delay Time Low

Function: Sets the time required for low current threshold to be exceeded until trip occurs
Immediate = 0
Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Overcurrent Delay Time Low	0.1 – 6553.5	16 Bits	0.1	Seconds	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Set Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Byte 2/3 – Overcurrent Trip Delay Time Mid

Function: Sets the time required for mid current threshold to be exceeded until trip occurs
Immediate = 0
Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Overcurrent Delay Time Mid	0.1 – 6553.5	16 Bits	0.1	Seconds	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Set Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Byte 4/5 – Overcurrent Trip Delay Time High

Function: Sets the time required for high current threshold to be exceeded until trip occurs
Immediate = 0
Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Overcurrent Delay Time High	0.1 – 6553.5	16 Bits	0.1	Seconds	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Set Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Byte 6/7 – Off Delay Period

Function: Sets the period for contacts to stay closed until next contactor close command
Unused = 0
Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Off Delay Period	1 – 65535	16 Bits	0.1	Seconds	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Set Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Setting: Miscellaneous Settings

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
6	00	180	this unit	user unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
-	Settings (bits)	Baud Rate	Report Period	Low Coil Voltage shutoff		Over Voltage Protection Limit	

Byte 0/1 – Over Voltage Protection Limit

Function: Sets the contactor voltage high trip point. Contact exceeding this voltage immediately opens contact.

Unused = 0

Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Over Voltage Protection Limit	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Volts Set Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 2/3 – Low Coil Voltage shutoff

Function: "Battery Saver" Sets the coil voltage trip point. Coil less than this voltage immediately opens contact.

Unused = 0

Default setting = 0

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Low Coil Voltage Shutoff	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Volts Set Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 4 – Report Period

Function: Defines the message repetition rate at which reports 1 through 8 are sent

0 – turns off reports being sent

Default setting = 100 (10 Seconds)

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Report Period	0.1– 25.5	8 Bits	0.1	Seconds	0	UnSigned	Set Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Set Value = 250: (250 x 0.1) - 0 = 25 Seconds

Byte 5 – Baud Rate

Function: Defines the CAN bus data rate. 250Kbits / second and 500Kbits / second are standard

Note: Not all values are supported

Default setting = 25

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Set value * factor) - offset
Baud Rate	250 – 500	8 Bits	10	K Baud	0	UnSigned	Set Value = 25 (25 x 10) - 0 = 250 K baud Set Value = 50: (50 x 10) - 0 = 500 K baud

Byte 6 – Settings (bits)

Bit 7	Bit 6	Bit 5	Bit 4	B Bit 3	Bit 2	Bit 1	Bit 0
-	-	-	-	-	-	Delay Timer Used	Power up State

Bit 0 Power up State

1 = Closed on power up

0 = Open on power up (default)

Bit 1 Delay Timer Used

0 = No delay used

1 = Use delay on break (after issue of open command)

Bits 2 – 7 Un-implemented. Set to 0.

Byte 7 Un-implemented. Set to 0.

Report: Status Report 1

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	181	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
Countdown to Trip Timer		Status (bits)	Ctrl Voltage		Temp-erature	Current	

Byte 0/1 – Current

Function: reports the most recent value of current measured across the contactor

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Current	-32768 to 32767	16 Bits	1	Amps	0	Signed	Return Value = 1 (1 x 1) - 0 = 1 Amp Return Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 2 – Temperature

Function: reports the most recent temperature value measured inside the contactor

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Temperature	-40 to 215	8 Bits	1	Deg C	-40	UnSigned	Return Value = 0 (1 x 1) - 40 = -40 C° Return Value = 250: (250 x 1) - 40 = 210 C°

Byte 3/4 – Control Voltage

Function: Reports the most recent control (coil) value measured

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Control Voltage	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 5 – Status (bits)

Bit 7	Bit 6	Bit 5	Bit 4	B Bit 3	Bit 2	Bit 1	Bit 0
Current Fault	Delay Trip	Over Voltage Trip	UnderVoltage Trip	Current Trip Bit High	Current Trip Mid	Current Trip Lo	Contactor State

Bit 7 **Current Fault**

1 = Current measured when contact open (possible weld)

0 = Normal

Bit 6 **Delay Trip**

1 = Most recent trip was due to delay timer running out

0 = No Delay Trip occurred

Bit 5 **Over Voltage Trip**

1 = Most recent trip was due to an over voltage condition on main terminals

0 = No Over voltage Trip occurred

Bit 4 **Under Voltage Trip**

1 = Most recent trip was due to an under voltage condition on the control power

0 = No Delay Trip occurred

Bit 3 **Current Trip Bit High**

1 = Most recent trip was due to High Current set point exceeded

0 = No High Current set point exceeded

Bit 2 **Current Trip Bit Mid**

1 = Most recent trip was due to High Current set point exceeded

0 = No Mid Current set point exceeded

Bit 1 **Current Trip Bit Low**

1 = Most recent trip was due to High Current set point exceeded

0 = No Low Current set point exceeded

Bit 0 **Contactor State**

1 = Contacts currently closed

0 = Contacts currently open

Byte 6/7 – Countdown to Trip

Function: Reports (shortest) of any trip timer value currently running down

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Countdown to Trip	0 – 65535	16 Bits	0.1	Seconds	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Return Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Report: Status Report 2

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	182	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
-	Total Cycle count			Terminal A1- Voltage		Terminal A2+ Voltage	

Byte 0/1 – Terminal A2+ Voltage

Function: Reports the most recent Terminal A2+ value measured

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Terminal A2+ Voltage	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 2/3 – Terminal A1- Voltage

Function: Reports the most recent Terminal A1- value measured

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Terminal A1- Voltage	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 4/5/6 – Total Cycle count

Function: Reports total number of times contactor has been cycled

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Total Cycle Count	1 – 16,777,215	24 Bits	1	Cycles	0	UnSigned	Return Value = 5 (5 x 1) - 0 = 5 Cycles Return Value = 1000: (1000 x 1) - 0 = 1000 Cycles

Byte 7 – Un-implemented. Read 0

Report: Status Report 3

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	183	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
Over Voltage Trip Count		Low Voltage Trip count		Hardware version		Firmware version	

Byte 0/1 – Firmware Version

Function: Reports the firmware version (Major.Minor)

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Firmware Version	1.01 - 99.99	16 Bits	0.01	Major.Minor	0	UnSigned	Return Value = 208 (208 x 0.01) - 0 = ver. 2.08 Return Value = 1001: (1001 x 0.01) - 0 = ver.10.01

Byte 2/3 – Hardware Version

Function: Reports the Hardware version (Major.Minor)

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Hardware Version	1.01 - 99.99	16 Bits	0.01	Major.Minor	0	UnSigned	Return Value = 208 (208 x 0.01) - 0 = ver.2.08 Return Value = 1001: (1001 x 0.01) - 0 = ver.10.01

Byte 4/5 – Low Voltage Trip count

Function: Returns the number of low coil voltage trip occurrences.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Low Voltage Trip Count	0– 65535	16 Bits	1	Counts	0	UnSigned	Return Value = 5 (5 x 1) - 0 = 5 Counts Return Value = 1000: (1000 x 1) - 0 = 1000 Counts

Byte 6/7 – Over Voltage Trip count

Function: Returns the number of Over Voltage Trip occurrences.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Over Voltage Trip count	1 – 65535	16 Bits	1	Counts	0	UnSigned	Return Value = 5 (5 x 1) - 0 = 5 Counts Return Value = 1000: (1000 x 1) - 0 = 1000 Counts

Report: Status Report 4

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	184	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
-	-	Overcurrent Trip High		Overcurrent Trip Mid		Overcurrent Trip Low	

Byte 0/1 – Overcurrent Trip Low

Function: Returns the lowest current trip point setting.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Overcurrent Trip Low	-32768 to 32767	16 Bits	1	Amps	0	Signed	Return Value = 1 (1 x 1) - 0 = 1 Amp Return Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 2/3 – Overcurrent Trip Mid

Function: Returns the mid current trip point setting.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Overcurrent Trip Mid	-32768 to 32767	16 Bits	1	Amps	0	Signed	Return Value = 1 (1 x 1) - 0 = 1 Amp Return Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 4/5 – Overcurrent Trip High

Function: Returns the high current trip point setting.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Overcurrent Trip High	-32768 to 32767	16 Bits	1	Amps	0	Signed	Return Value = 1 (1 x 1) - 0 = 1 Amp Return Value = -1: (-1 x 1) - 0 = -1 Amp

Byte 6 – Byte 7 Un-implemented. Read 0

Report: Status Report 5

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	185	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
Off Delay Period		Overcurrent Trip Delay Time High		Overcurrent Trip Delay Time Mid		Overcurrent Trip Delay Time Low	

Byte 0/1 – Overcurrent Trip Delay Time Low

Function: Returns the lowest Overcurrent Delay Time setting

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Overcurrent Delay Time Low	0.1 – 6553.5	16 Bits	0.1	Seconds	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Return Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Byte 2/3 – Overcurrent Trip Delay Time Mid

Function: Returns the mid Overcurrent Delay Time setting

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Overcurrent Delay Time Mid	0.1 – 6553.5	16 Bits	0.1	Seconds	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Return Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Byte 4/5 – Overcurrent Trip Delay Time High

Function: Returns the high Overcurrent Delay Time setting

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Overcurrent Delay Time High	0.1 – 6553.5	16 Bits	0.1	Seconds	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Return Value = 1000: (1000 x 0.1) - 0 = 100 Seconds

Byte 6/7 – Off Delay Period

Function: Returns the off delay period setting

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Off Delay Period	1 – 65535	16 Bits	0.1	Seconds	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Sec Return Value = 1000: (1000 x 0.1) - 0 = 100 Sec

Report: Status Report 6

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	186	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
-	Settings (Bits)	Baud Rate	Report Period	Low Coil Voltage shutoff		Over Voltage Protection Limit	

Byte 0/1 – Over Voltage Protection Limit

Function: Returns the contactor voltage high trip point setting.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Over Voltage Protection Limit	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 2/3 – Low Coil Voltage shutoff

Function: Returns the coil voltage trip point setting.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Low Coil Voltage Shutoff	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 4 – Report Period

Function: Returns the "Heartbeat" rate at which reports 1 through 8 are sent

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Report Period	0.1– 25.5	8 Bits	0.1	Seconds	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Seconds Return Value = 250: (250 x 0.1) - 0 = 25 Seconds

Byte 5 – Baud Rate

Function: Returns the CAN bus data rate. 250Kbits / second and 500Kbits / second are standard

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Baud Rate	250 – 500	8 Bits	10	K Baud	0	UnSigned	Return Value = 25 (25 x 10) - 0 = 250 K baud Return Value = 50: (50 x 10) - 0 = 500 K baud

Byte 6 – Settings (bits)

Bit 7	Bit 6	Bit 5	Bit 4	B Bit 3	Bit 2	Bit 1	Bit 0
-	-	-	-	-	-	-	Power up State

Bit 0 Power up State

1 = Closed on power up

0 = Open on power up (default)

Bits 1 – 7 Un-implemented. Set to 0.

Byte 7 – Un-implemented. Read 0

Report: Status Report 7

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	187	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
Minimum Voltage		Peak Voltage		Peak Current Negative		Peak Current Positive	

Byte 0/1 – Peak Current Positive

Function: Returns the historically highest positive current measured through the device

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Peak current Positive	0 to 32767	16 Bits	1	Amps	0	UnSigned	Return Value = 1 (1 x 1) - 0 = 1 Amp Return Value = 1000: (1000 x 1) - 0 = 1000 Amp

Byte 2/3 – Peak Current Negative

Function: Returns the historically highest negative current measured through the device (absolute value)

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Peak current Negative	0 to 32767	16 Bits	-1	Amps	0	UnSigned	Return Value = 1 (1 x -1) - 0 = -1 Amp Return Value = 1000: (1000 x -1) - 0 = -1000 Amp

Byte 4/5 – Peak Voltage

Function: Returns historically highest terminal voltage.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Peak Voltage	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Byte 6/7 – Minimum Voltage

Function: Returns historically lowest terminal voltage.

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Minimum Voltage	0.1– 6553.5	16 Bits	0.1	Volts	0	UnSigned	Return Value = 5 (5 x 0.1) - 0 = 0.5 Volts Return Value = 1000: (1000 x 0.1) - 0 = 100 Volts

Report: Status Report 8

Priority	EDP/DP	PDU-F	Destination PDU-S (DA)	Source Address
7	00	188	255	this unit

Byte 7	Byte 6	Byte 5	Byte 4	Byte 3	Byte 2	Byte 1	Byte 0
Min. Temp.	Max Temp.	Current Trip High Counts		Current Trip Mid Counts		Current Trip Low Counts	

Byte 0/1 – Current Trip Low Counts

Function: Returns the number of occurrences of tripping the Low current setpoint

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Current Trip Low Counts	0– 65535	16 Bits	1	Counts	0	UnSigned	Return Value = 5 (5 x 1) - 0 = 5 Counts Return Value = 1000: (1000 x 1) - 0 = 1000 Counts

Byte 2/3 – Current Trip Mid Counts

Function: Returns the number of occurrences of tripping the Mid current setpoint

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Current Trip Mid Counts	0– 65535	16 Bits	1	Counts	0	UnSigned	Return Value = 5 (5 x 1) - 0 = 5 Counts Return Value = 1000: (1000 x 1) - 0 = 1000 Counts

Byte 4/5 – Current Trip High Counts

Function: Returns the number of occurrences of tripping the High current setpoint

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Current Trip High Counts	0– 65535	16 Bits	1	Counts	0	UnSigned	Return Value = 5 (5 x 1) - 0 = 5 Counts Return Value = 1000: (1000 x 1) - 0 = 1000 Counts

Byte 6 – Max. Temperature

Function: reports the historically highest temperature value measured inside the contactor

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Max Temperature	-40 to 215	8 Bits	1	Deg C	-40	UnSigned	Return Value = 0 (1 x 1) - 40 = -40 C° Return Value = 250: (250 x 1) - 40 = 210 C°

Byte 7 – Min. Temperature

Function: reports the historically lowest temperature value measured inside the contactor

Signal Name	Value Range	Bit Length	Factor	Unit	Offset	Signed?	Example: (Return value * factor) - offset
Min Temperature	-40 to 215	8 Bits	1	Deg C	-40	UnSigned	Return Value = 0 (1 x 1) - 40 = -40 C° Return Value = 250: (250 x 1) - 40 = 210 C°

REVISION HISTORY

Table 0.1: Document Revision History

Release No.	Date	Revision Description
---	11-Oct-21	First Release; G.Lyons

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