Controller Sample_PRG_ENet_ODVA_AddOnProfiles
RevB = error fixes Rev C = Added ACS850, ACSM1, ACS580, ACS380 and ACS880
Controller Fault Handler
Power-Up Handler

Tasks

MainTask
- **EtherNet_Drive_Control**
  - **MainRoutine**
  - **ACS350_ACS355_Control_Enet**
  - **ACS380_Control_Enet**
  - **ACS550_Control_Enet**
  - **ACS580_Control_Enet**
  - **ACS800_Control_Enet**
  - **ACS850_Control_Enet**
  - **ACS880_Control_Enet**
  - **ACSM1_Control_Enet**
  - **UDT_PROGRAM**

Unscheduled Programs / Phases
- **MainProgram**
  - **MainRoutine**

Motion Groups

Ungrouped Axes

Add-On Instructions

ABB_6
File Name: ABB_AOI_171_121_6W Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user
- **Logic**
  Transfer data to and from the drive
- **Prescan**
  Prescan Logic Conditioning
- **EnableInFalse**
  Protection Logic for EnableIn False

ABB_8
File Name: ABB_AOI_173_123_13W
- **Logic**
  Transfer data to and from the drive
- **Prescan**
  Prescan Logic Conditioning
- **EnableInFalse**
  Protection Logic for EnableIn False

Data Types

User-Defined
- **ABB_UDT_121_6**
  ODVA AC/DC Drive Output Instance 121 Size 6 INTs Cntrl Word, Spd Ref, + 4 Data Outputs
- **ABB_UDT_123**
  ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
- **ABB_UDT_171_6**
  AC/DC Drive Profile Input Instance 171 Size 6 INTs Sts Word, Spd Fbk + 4 Data Inputs
- **ABB_UDT_173**
  ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs

Strings
- **STRING**

Add-On-Defined
- **ABB_6**
  File Name: ABB_AOI_171_121_6W Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user
- **ABB_8**
  File Name: ABB_AOI_173_123_13W

Module-Defined
- **AB:1769_IF4XOF2:C:0**

- **AB:1769_IF4XOF2:I:0**
- **AB:1769_IF4XOF2:O:0**
- **AB:1769_IQ6XOW4:C:0**
- **AB:1769_IQ6XOW4:I:0**
- **AB:1769_IQ6XOW4:O:0**
- **AB:1769_SDN_364Bytes:O:0**
- **AB:1769_SDN_496Bytes:I:0**
- **AB:1769_SDN_CommandRegister:O:0**
- **AB:1769_SDN_StatusRegister:I:0**
- **AB:1769_SDN_Status_Struct:I:0**
- **AB:ETHERNET_MODULE:C:0**
- **AB:ETHERNET_MODULE_INT_12Bytes:I:0**
- **AB:ETHERNET_MODULE_INT_12Bytes:O:0**
- **AB:ETHERNET_MODULE_INT_26Bytes:I:0**
- **AB:ETHERNET_MODULE_INT_26Bytes:O:0**
- **AB:ETHERNET_MODULE_INT_8Bytes:I:0**
- **AB:ETHERNET_MODULE_INT_8Bytes:O:0**

Trends

I/O Configuration

Backplane, CompactLogix System

- **1769-L32E Sample_PRG_ENet_ODVA_AddOnProfiles**
- **1769-L32E Ethernet Port LocalENB**
  - **Ethernet**
    - **1769-L32E Ethernet Port LocalENB**
    - **ETHERNET-MODULE FENA_ACS380_ODVA_PROFILE**
      FENA installed on a ACS380 programmed for ODVA Drives profile. The FENA will send 13 INT and receive13 INT.
    - **ETHERNET-MODULE RETA_ACS800_ODVA_PROFILE**
      RETA installed on ACS800 programmed for ODVA profile. The RETA will send 6 INT and receive 6 INT.
    - **ETHERNET-MODULE RETA_ACS550_ODVA_PROFILE**
      RETA installed on ACS550 programmed for ODVA profile. The RETA will send 6 INT and receive 6 INT.
    - **ETHERNET-MODULE FENA_ACSM1_ODVA_PROFILE**
      FENA installed on a ACSM1 programmed for ODVA Drives profile. The FENA will send 13 INT and receive13 INT.
    - **ETHERNET-MODULE FENA_ACS350_355_ODVA_PROFILE**
      FENA installed on a ACS350/ACS355 programmed for ODVA Drives profile. The FENA will send 13 INT and receive13 INT.
    - **ETHERNET-MODULE FENA_ACS580_ODVA_PROFILE**
      FENA installed on a ACS580 programmed for ODVA Drives profile. The FENA will send 13 INT and receive13 INT.
    - **ETHERNET-MODULE FENA_ACS850_ODVA_PROFILE**
      FENA installed on a ACS850 programmed for ODVA Drives profile. The FENA will send 13 INT and receive13 INT.
    - **ETHERNET-MODULE FENA_ACS880_ODVA_PROFILE**
      FENA installed on a ACS880 programmed for ODVA Drives profile. The FENA will send 13 INT and receive13 INT.
- **CompactBus Local**
  - **[1] 1769-IF4XOF2/A Analog_In_Out**
  - **[2] 1769-IQ6XOW4/B Digital_Input_Output**

Name	Value	Data Type	Scope
ACS350_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACS350_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - 3(DIV)			
ACS350_Ref1_Total_ENet	573	DINT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACS350_Ref1_Total_ENet - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - *3(DIV), 3(MOV)*			
ACS550_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACS550_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACS550_Control_Enet - 3(DIV)			
ACS550_Ref1_Total_ENet	573	DINT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACS550_Ref1_Total_ENet - EtherNet_Drive_Control/ACS550_Control_Enet - *3(DIV), 3(MOV)*			
ACS580_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACS580_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACS380_Control_Enet - 3(DIV)			
ACS580_Ref1_Total_ENet	0	INT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACS580_Ref1_Total_ENet - EtherNet_Drive_Control/ACS380_Control_Enet - *3(DIV), 3(MOV)*			
ACS800_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACS800_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACS800_Control_Enet - 3(DIV)			
ACS800_Ref1_Total_ENet	573	DINT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACS800_Ref1_Total_ENet - EtherNet_Drive_Control/ACS800_Control_Enet - *3(DIV), 3(MOV)*			
ACS850_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACS850_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACS850_Control_Enet - 3(DIV)			
ACS850_Ref1_Total_ENet	0	INT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACS850_Ref1_Total_ENet - EtherNet_Drive_Control/ACS850_Control_Enet - *3(DIV), 3(MOV)*			
ACS880_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACS880_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACS880_Control_Enet - 3(DIV)			
ACS880_Ref1_Total_ENet	0	INT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACS880_Ref1_Total_ENet - EtherNet_Drive_Control/ACS880_Control_Enet - *3(DIV), 3(MOV)*			
ACSM1_Ref_Divider_1_ENet	17.63555	REAL	Sample_PRG_ENet_ODVA_AddOnProfiles
ACSM1_Ref_Divider_1_ENet - EtherNet_Drive_Control/ACSM1_Control_Enet - 3(DIV)			
ACSM1_Ref1_Total_ENet	0	INT	Sample_PRG_ENet_ODVA_AddOnProfiles
*ACSM1_Ref1_Total_ENet - EtherNet_Drive_Control/ACSM1_Control_Enet - *3(DIV), 3(MOV)*			
FENA_ACS350_355_Actual_Speed	0	INT	Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS350_355_Actual_Speed - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - *4(MOV)*			
FENA_ACS350_355_I_ASSY_173		ABB_UDT_173	Sample_PRG_ENet_ODVA_AddOnProfiles
ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs			

FENA_ACS350_355_I_ASSY_173 (Continued)
*FENA_ACS350_355_I_ASSY_173 - EtherNet_Drive_Control/UDT_PROGRAM - *0(ABB_8)*
FENA_ACS350_355_I_ASSY_173.Actual_Speed - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - 4(MOV)

FENA_ACS350_355_O_ASSY_123 ABB_UDT_123 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
*FENA_ACS350_355_O_ASSY_123 - EtherNet_Drive_Control/UDT_PROGRAM - *0(ABB_8)*
*FENA_ACS350_355_O_ASSY_123.Fault_Reset - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - *2(OTE)*
*FENA_ACS350_355_O_ASSY_123.Run_FWD - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - *0(OTE)*
*FENA_ACS350_355_O_ASSY_123.Run_REV - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - *1(OTE)*
*FENA_ACS350_355_O_ASSY_123.Speed_Ref - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - *3(MOV)*

FENA_ACS350_355_ODVA_PROFILE:I
AB:ETHERNET_MODULE_INT_26Bytes:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS350_355_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *0(ABB_8)*

FENA_ACS350_355_ODVA_PROFILE:O
AB:ETHERNET_MODULE_INT_26Bytes:O:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS350_355_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *0(ABB_8)*

FENA_ACS380_I_ASSY_173 ABB_UDT_173 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs
*FENA_ACS380_I_ASSY_173 - EtherNet_Drive_Control/UDT_PROGRAM - *4(ABB_8)*

FENA_ACS380_O_ASSY_123 ABB_UDT_123 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
*FENA_ACS380_O_ASSY_123 - EtherNet_Drive_Control/UDT_PROGRAM - *4(ABB_8)*

FENA_ACS380_ODVA_PROFILE:I
AB:ETHERNET_MODULE_INT_26Bytes:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS380_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *4(ABB_8)*

FENA_ACS380_ODVA_PROFILE:O
AB:ETHERNET_MODULE_INT_26Bytes:O:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS380_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *4(ABB_8)*

FENA_ACS580_Actual_Speed 0 INT Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS580_Actual_Speed - EtherNet_Drive_Control/ACS380_Control_Enet - *4(MOV)*

FENA_ACS580_I_ASSY_173 ABB_UDT_173 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs
*FENA_ACS580_I_ASSY_173 - EtherNet_Drive_Control/UDT_PROGRAM - *7(ABB_8)*
FENA_ACS580_I_ASSY_173.Actual_Speed - EtherNet_Drive_Control/ACS380_Control_Enet - 4(MOV)

FENA_ACS580_O_ASSY_123 ABB_UDT_123 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
*FENA_ACS580_O_ASSY_123 - EtherNet_Drive_Control/UDT_PROGRAM - *7(ABB_8)*
*FENA_ACS580_O_ASSY_123.Fault_Reset - EtherNet_Drive_Control/ACS380_Control_Enet - *2(OTE)*
*FENA_ACS580_O_ASSY_123.Run_FWD - EtherNet_Drive_Control/ACS380_Control_Enet - *0(OTE)*
*FENA_ACS580_O_ASSY_123.Run_REV - EtherNet_Drive_Control/ACS380_Control_Enet - *1(OTE)*

FENA_ACS580_O_ASSY_123 (Continued)
*FENA_ACS580_O_ASSY_123.Speed_Ref - EtherNet_Drive_Control/ACS380_Control_Enet - *3(MOV)*

FENA_ACS580_ODVA_PROFILE:I AB:ETHERNET_MODULE_INT_26Bytes:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS580_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *7(ABB_8)*

FENA_ACS580_ODVA_PROFILE:O AB:ETHERNET_MODULE_INT_26Bytes:O:0 Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS580_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *7(ABB_8)*

FENA_ACS850_Actual_Speed 0 INT Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS850_Actual_Speed - EtherNet_Drive_Control/ACS850_Control_Enet - *4(MOV)*

FENA_ACS850_I_ASSY_173 ABB_UDT_173 Sample_PRG_ENet_ODVA_AddOnProfiles
ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs
*FENA_ACS850_I_ASSY_173 - EtherNet_Drive_Control/UDT_PROGRAM - *5(ABB_8)*
FENA_ACS850_I_ASSY_173.Actual_Speed - EtherNet_Drive_Control/ACS850_Control_Enet - 4(MOV)

FENA_ACS850_O_ASSY_123 ABB_UDT_123 Sample_PRG_ENet_ODVA_AddOnProfiles
ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
*FENA_ACS850_O_ASSY_123 - EtherNet_Drive_Control/UDT_PROGRAM - *5(ABB_8)*
*FENA_ACS850_O_ASSY_123.Fault_Reset - EtherNet_Drive_Control/ACS850_Control_Enet - *2(OTE)*
*FENA_ACS850_O_ASSY_123.Run_FWD - EtherNet_Drive_Control/ACS850_Control_Enet - *0(OTE)*
*FENA_ACS850_O_ASSY_123.Run_REV - EtherNet_Drive_Control/ACS850_Control_Enet - *1(OTE)*
*FENA_ACS850_O_ASSY_123.Speed_Ref - EtherNet_Drive_Control/ACS850_Control_Enet - *3(MOV)*

FENA_ACS850_ODVA_PROFILE:I AB:ETHERNET_MODULE_INT_26Bytes:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS850_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *5(ABB_8)*

FENA_ACS850_ODVA_PROFILE:O AB:ETHERNET_MODULE_INT_26Bytes:O:0 Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS850_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *5(ABB_8)*

FENA_ACS880_Actual_Speed 0 INT Sample_PRG_ENet_ODVA_AddOnProfiles
*FENA_ACS880_Actual_Speed - EtherNet_Drive_Control/ACS880_Control_Enet - *4(MOV)*

FENA_ACS880_I_ASSY_173 ABB_UDT_173 Sample_PRG_ENet_ODVA_AddOnProfiles
ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs
*FENA_ACS880_I_ASSY_173 - EtherNet_Drive_Control/UDT_PROGRAM - *3(ABB_8)*
FENA_ACS880_I_ASSY_173.Actual_Speed - EtherNet_Drive_Control/ACS880_Control_Enet - 4(MOV)

FENA_ACS880_O_ASSY_123 ABB_UDT_123 Sample_PRG_ENet_ODVA_AddOnProfiles
ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
*FENA_ACS880_O_ASSY_123 - EtherNet_Drive_Control/UDT_PROGRAM - *3(ABB_8)*
*FENA_ACS880_O_ASSY_123.Fault_Reset - EtherNet_Drive_Control/ACS880_Control_Enet - *2(OTE)*
*FENA_ACS880_O_ASSY_123.Run_FWD - EtherNet_Drive_Control/ACS880_Control_Enet - *0(OTE)*
*FENA_ACS880_O_ASSY_123.Run_REV - EtherNet_Drive_Control/ACS880_Control_Enet - *1(OTE)*
*FENA_ACS880_O_ASSY_123.Speed_Ref - EtherNet_Drive_Control/ACS880_Control_Enet - *3(MOV)*

FENA_ACS880_ODVA_PROFILE:I (Continued)

FENA_ACS880_ODVA_PROFILE:I AB:ETHERNET_MODULE_INT_26Bytes:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS880_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *3(ABB_8)*

FENA_ACS880_ODVA_PROFILE:O AB:ETHERNET_MODULE_INT_26Bytes:O:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACS880_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *3(ABB_8)*

FENA_ACSM1_Actual_Speed 0 INT Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACSM1_Actual_Speed - EtherNet_Drive_Control/ACSM1_Control_Enet - *4(MOV)*

FENA_ACSM1_I_ASSY_173 ABB_UDT_173 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs
*FENA_ACSM1_I_ASSY_173 - EtherNet_Drive_Control/UDT_PROGRAM - *6(ABB_8)*
FENA_ACSM1_I_ASSY_173.Actual_Speed - EtherNet_Drive_Control/ACSM1_Control_Enet - 4(MOV)

FENA_ACSM1_O_ASSY_123 ABB_UDT_123 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words
*FENA_ACSM1_O_ASSY_123 - EtherNet_Drive_Control/UDT_PROGRAM - *6(ABB_8)*
*FENA_ACSM1_O_ASSY_123.Fault_Reset - EtherNet_Drive_Control/ACSM1_Control_Enet - *2(OTE)*
*FENA_ACSM1_O_ASSY_123.Run_FWD - EtherNet_Drive_Control/ACSM1_Control_Enet - *0(OTE)*
*FENA_ACSM1_O_ASSY_123.Run_REV - EtherNet_Drive_Control/ACSM1_Control_Enet - *1(OTE)*
*FENA_ACSM1_O_ASSY_123.Speed_Ref - EtherNet_Drive_Control/ACSM1_Control_Enet - *3(MOV)*

FENA_ACSM1_ODVA_PROFILE:I AB:ETHERNET_MODULE_INT_26Bytes:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACSM1_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *6(ABB_8)*

FENA_ACSM1_ODVA_PROFILE:O AB:ETHERNET_MODULE_INT_26Bytes:O:0 Sample_PRG_ENet_ODVA_AddOnProfiles

*FENA_ACSM1_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *6(ABB_8)*

FENA_ADD_ON_PROFILE_ACS350_355 ABB_8 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_173_123_13W
*FENA_ADD_ON_PROFILE_ACS350_355 - EtherNet_Drive_Control/UDT_PROGRAM - *0(ABB_8)*

FENA_ADD_ON_PROFILE_ACS380 ABB_8 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_173_123_13W
*FENA_ADD_ON_PROFILE_ACS380 - EtherNet_Drive_Control/UDT_PROGRAM - *4(ABB_8)*

FENA_ADD_ON_PROFILE_ACS580 ABB_8 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_173_123_13W
*FENA_ADD_ON_PROFILE_ACS580 - EtherNet_Drive_Control/UDT_PROGRAM - *7(ABB_8)*

FENA_ADD_ON_PROFILE_ACS850 ABB_8

FENA_ADD_ON_PROFILE_ACS850 (Continued)

Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_173_123_13W
*FENA_ADD_ON_PROFILE_ACS850 - EtherNet_Drive_Control/UDT_PROGRAM - *5(ABB_8)*

FENA_ADD_ON_PROFILE_ACS880 ABB_8 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_173_123_13W
*FENA_ADD_ON_PROFILE_ACS880 - EtherNet_Drive_Control/UDT_PROGRAM - *3(ABB_8)*

FENA_ADD_ON_PROFILE_ACSM1 ABB_8 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_173_123_13W
*FENA_ADD_ON_PROFILE_ACSM1 - EtherNet_Drive_Control/UDT_PROGRAM - *6(ABB_8)*

Local:1:I AB:1769_IF4XOF2:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles

Local:1:I.Ch0Data - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - 3(DIV)
Local:1:I.Ch0Data - EtherNet_Drive_Control/ACS380_Control_Enet - 3(DIV)
Local:1:I.Ch0Data - EtherNet_Drive_Control/ACS550_Control_Enet - 3(DIV)
Local:1:I.Ch0Data - EtherNet_Drive_Control/ACS800_Control_Enet - 3(DIV)
Local:1:I.Ch0Data - EtherNet_Drive_Control/ACS850_Control_Enet - 3(DIV)
Local:1:I.Ch0Data - EtherNet_Drive_Control/ACS880_Control_Enet - 3(DIV)
Local:1:I.Ch0Data - EtherNet_Drive_Control/ACSM1_Control_Enet - 3(DIV)

Local:2:I AB:1769_IQ6XOW4:I:0 Sample_PRG_ENet_ODVA_AddOnProfiles

Fault Reset
Local:2:I.Data.0 - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - 0(XIC)
Local:2:I.Data.0 - EtherNet_Drive_Control/ACS380_Control_Enet - 0(XIC)
Local:2:I.Data.0 - EtherNet_Drive_Control/ACS550_Control_Enet - 0(XIC)
Local:2:I.Data.0 - EtherNet_Drive_Control/ACS800_Control_Enet - 0(XIC)
Local:2:I.Data.0 - EtherNet_Drive_Control/ACS850_Control_Enet - 0(XIC)
Local:2:I.Data.0 - EtherNet_Drive_Control/ACS880_Control_Enet - 0(XIC)
Local:2:I.Data.0 - EtherNet_Drive_Control/ACSM1_Control_Enet - 0(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - 1(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACS380_Control_Enet - 1(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACS550_Control_Enet - 1(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACS800_Control_Enet - 1(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACS850_Control_Enet - 1(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACS880_Control_Enet - 1(XIC)
Local:2:I.Data.1 - EtherNet_Drive_Control/ACSM1_Control_Enet - 1(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACS350_ACS355_Control_Enet - 2(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACS380_Control_Enet - 2(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACS550_Control_Enet - 2(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACS800_Control_Enet - 2(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACS850_Control_Enet - 2(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACS880_Control_Enet - 2(XIC)
Local:2:I.Data.2 - EtherNet_Drive_Control/ACSM1_Control_Enet - 2(XIC)

RETA_ACS550_Actual_Speed 0 INT Sample_PRG_ENet_ODVA_AddOnProfiles

*RETA_ACS550_Actual_Speed - EtherNet_Drive_Control/ACS550_Control_Enet - *4(MOV)*

RETA_ACS550_I_ASSY_171 ABB_UDT_171_6 Sample_PRG_ENet_ODVA_AddOnProfiles

AC/DC Drive Profile Input Instance 171 Size 6 INTs Sts Word, Spd Fbk + 4 Data Inputs
*RETA_ACS550_I_ASSY_171 - EtherNet_Drive_Control/UDT_PROGRAM - *2(ABB_6)*
RETA_ACS550_I_ASSY_171.Actual_Speed - EtherNet_Drive_Control/ACS550_Control_Enet - 4(MOV)

RETA_ACS550_O_ASSY_121 ABB_UDT_121_6

RETA_ACS550_O_ASSY_121 (Continued)

Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Output Instance 121 Size 6 INTs Cntrl Word, Spd Ref, + 4 Data Outputs
*RETA_ACS550_O_ASSY_121 - EtherNet_Drive_Control/UDT_PROGRAM - *2(ABB_6)*
*RETA_ACS550_O_ASSY_121.Fault_Reset - EtherNet_Drive_Control/ACS550_Control_Enet - *2(OTE)*
*RETA_ACS550_O_ASSY_121.Run_FWD - EtherNet_Drive_Control/ACS550_Control_Enet - *0(OTE)*
*RETA_ACS550_O_ASSY_121.Run_REV - EtherNet_Drive_Control/ACS550_Control_Enet - *1(OTE)*
*RETA_ACS550_O_ASSY_121.Speed_Ref - EtherNet_Drive_Control/ACS550_Control_Enet - *3(MOV)*

RETA_ACS550_ODVA_PROFILE:I

AB:ETHERNET_MODULE_INT_12Bytes:I:0
Sample_PRG_ENet_ODVA_AddOnProfiles

Actual Speed (RPM)
*RETA_ACS550_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *2(ABB_6)*

RETA_ACS550_ODVA_PROFILE:O

AB:ETHERNET_MODULE_INT_12Bytes:O:0
Sample_PRG_ENet_ODVA_AddOnProfiles

*RETA_ACS550_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *2(ABB_6)*

RETA_ACS800_Actual_Speed 0 INT Sample_PRG_ENet_ODVA_AddOnProfiles

*RETA_ACS800_Actual_Speed - EtherNet_Drive_Control/ACS800_Control_Enet - *4(MOV)*

RETA_ACS800_I_ASSY_171 ABB_UDT_171_6 Sample_PRG_ENet_ODVA_AddOnProfiles

AC/DC Drive Profile Input Instance 171 Size 6 INTs Sts Word, Spd Fbk + 4 Data Inputs
*RETA_ACS800_I_ASSY_171 - EtherNet_Drive_Control/UDT_PROGRAM - *1(ABB_6)*
RETA_ACS800_I_ASSY_171.Actual_Speed - EtherNet_Drive_Control/ACS800_Control_Enet - 4(MOV)

RETA_ACS800_O_ASSY_121 ABB_UDT_121_6 Sample_PRG_ENet_ODVA_AddOnProfiles

ODVA AC/DC Drive Output Instance 121 Size 6 INTs Cntrl Word, Spd Ref, + 4 Data Outputs
*RETA_ACS800_O_ASSY_121 - EtherNet_Drive_Control/UDT_PROGRAM - *1(ABB_6)*
*RETA_ACS800_O_ASSY_121.Fault_Reset - EtherNet_Drive_Control/ACS800_Control_Enet - *2(OTE)*
*RETA_ACS800_O_ASSY_121.Run_FWD - EtherNet_Drive_Control/ACS800_Control_Enet - *0(OTE)*
*RETA_ACS800_O_ASSY_121.Run_REV - EtherNet_Drive_Control/ACS800_Control_Enet - *1(OTE)*
*RETA_ACS800_O_ASSY_121.Speed_Ref - EtherNet_Drive_Control/ACS800_Control_Enet - *3(MOV)*

RETA_ACS800_ODVA_PROFILE:I

AB:ETHERNET_MODULE_INT_12Bytes:I:0
Sample_PRG_ENet_ODVA_AddOnProfiles

*RETA_ACS800_ODVA_PROFILE:I - EtherNet_Drive_Control/UDT_PROGRAM - *1(ABB_6)*

RETA_ACS800_ODVA_PROFILE:O

AB:ETHERNET_MODULE_INT_12Bytes:O:0
Sample_PRG_ENet_ODVA_AddOnProfiles

*RETA_ACS800_ODVA_PROFILE:O - EtherNet_Drive_Control/UDT_PROGRAM - *1(ABB_6)*

RETA_ADD_ON_PROFILE_ACS550

ABB_6 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_171_121_6W Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user
*RETA_ADD_ON_PROFILE_ACS550 - EtherNet_Drive_Control/UDT_PROGRAM - *2(ABB_6)*

RETA_ADD_ON_PROFILE_ACS800

ABB_6 Sample_PRG_ENet_ODVA_AddOnProfiles

File Name: ABB_AOI_171_121_6W Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user

RETA_ADD_ON_PROFILE_ACS800 (Continued)

*RETA_ADD_ON_PROFILE_ACS800 - EtherNet_Drive_Control/UDT_PROGRAM - *1(ABB_6)*

Sample program below is controlling a ACS350/ACS355 on Ethernet/IP. The ACS350/ACS355 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 0 - Run Fwd
Command
FENA_ACS350_355_O_ASSY_123.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 1 - Run Rev
Command
FENA_ACS350_355_O_ASSY_123.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 2 - Fault Reset
Request
FENA_ACS350_355_O_ASSY_123.Fault_Reset

3

Speed referance will be in RPM's

DIV
Divide
Source A Local:1:I.Ch0Data
10112
Source B ACS350_Ref_Divider_1_ENet
17.63555
Dest ACS350_Ref1_Total_ENet
573

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
+/- Speed Reference
(See documentation
for scaling)

MOV
Move
Source ACS350_Ref1_Total_ENet
573
Dest FENA_ACS350_355_O_ASSY_123.Speed_Ref
573

4

Actual Speed will be in RPM's

MOV

Move
Source FENA_ACS350_355_I_ASSY_173.Actual_Speed
0
Dest FENA_ACS350_355_Actual_Speed
0

(End)

Sample program below is controlling a ACS880 on Ethernet/IP. The ACS880 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 0 - Run Fwd
Command
FENA_ACS580_O_ASSY_123.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 1 - Run Rev
Command
FENA_ACS580_O_ASSY_123.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 2 - Fault Reset
Request
FENA_ACS580_O_ASSY_123.Fault_Reset

3

Speed referance will be in RPM's

DIV
Divide
Source A Local:1:I.Ch0Data
10112
Source B ACS580_Ref_Divider_1_ENet
17.63555
Dest ACS580_Ref1_Total_ENet
0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
+/- Speed Reference
(See documentation
for scaling)

MOV
Move
Source ACS580_Ref1_Total_ENet
0
Dest FENA_ACS580_O_ASSY_123.Speed_Ref
0

Actual Speed will be in RPM's

4

MOV
Move
Source FENA_ACS580_I_ASSY_173.Actual_Speed
0
Dest FENA_ACS580_Actual_Speed
0

(End)

Sample program below is controlling a ACS550 on Ethernet/IP. The ACS550 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 0 - Run Fwd
Command
RETA_ACS550_O_ASSY_121.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 1 - Run Rev
Command
RETA_ACS550_O_ASSY_121.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 2 - Fault Reset
Request
RETA_ACS550_O_ASSY_121.Fault_Reset

3

Speed referance will be in RPM's

DIV
Divide
Source A Local:1:I.Ch0Data
10112
Source B ACS550_Ref_Divider_1_ENet
17.63555
Dest ACS550_Ref1_Total_ENet
573

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
+/- Speed Reference
(See documentation
for scaling)

MOV
Move
Source ACS550_Ref1_Total_ENet
573
Dest RETA_ACS550_O_ASSY_121.Speed_Ref
573

4

Actual Speed will be in RPM's

MOV
Move
Source RETA_ACS550_I_ASSY_171.Actual_Speed
0
Dest RETA_ACS550_Actual_Speed
0

(End)

(End)

Sample program below is controlling a ACS800 on Ethernet/IP. The ACS800 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 0 - Run Fwd
Command
RETA_ACS800_O_ASSY_121.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 1 - Run Rev
Command
RETA_ACS800_O_ASSY_121.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 2 - Fault Reset
Request
RETA_ACS800_O_ASSY_121.Fault_Reset

3

Speed referance will be in RPM's

DIV
Divide
Source A Local:1:I.Ch0Data
10112
Source B ACS800_Ref_Divider_1_ENet
17.63555
Dest ACS800_Ref1_Total_ENet
573

MOV
Move
Source ACS800_Ref1_Total_ENet
573
Dest RETA_ACS800_O_ASSY_121.Speed_Ref
573

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
+/- Speed Reference
(See documentation
for scaling)

4

Actual Speed will be in RPM's

MOV
Move
Source RETA_ACS800_I_ASSY_171.Actual_Speed
0
Dest RETA_ACS800_Actual_Speed
0

(End)

Sample program below is controlling a ACS880 on Ethernet/IP. The ACS880 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 0 - Run Fwd
Command
FENA_ACS850_O_ASSY_123.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 1 - Run Rev
Command
FENA_ACS850_O_ASSY_123.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 2 - Fault Reset
Request
FENA_ACS850_O_ASSY_123.Fault_Reset

3

Speed referance will be in RPM's

DIV

Divide	
Source A	Local:1:I.Ch0Data 10112
Source B	ACS850_Ref_Divider_1_ENet 17.63555
Dest	ACS850_Ref1_Total_ENet 0

MOV

Move	
Source	ACS850_Ref1_Total_ENet 0
Dest	FENA_ACS850_O_ASSY_123.Speed_Ref 0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
+/- Speed Reference
(See documentation
for scaling)

Actual Speed will be in RPM's

4

MOV
Move
Source FENA_ACS850_I_ASSY_173.Actual_Speed
0
Dest FENA_ACS850_Actual_Speed
0

(End)

Sample program below is controlling a ACS880 on Ethernet/IP. The ACS880 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 0 - Run Fwd
Command
FENA_ACS880_O_ASSY_123.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 1 - Run Rev
Command
FENA_ACS880_O_ASSY_123.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 2 - Fault Reset
Request
FENA_ACS880_O_ASSY_123.Fault_Reset

3

Speed referance will be in RPM's

DIV
Divide
Source A Local:1:I.Ch0Data
10112
Source B ACS880_Ref_Divider_1_ENet
17.63555
Dest ACS880_Ref1_Total_ENet
0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
+/- Speed Reference
(See documentation
for scaling)

MOV
Move
Source ACS880_Ref1_Total_ENet
0
Dest FENA_ACS880_O_ASSY_123.Speed_Ref
0

4

Actual Speed will be in RPM's

MOV

Move
Source FENA_ACS880_I_ASSY_173.Actual_Speed
0
Dest FENA_ACS880_Actual_Speed
0

(End)

Sample program below is controlling a ACS880 on Ethernet/IP. The ACS880 is program to use ODVA profile for control and status.

0

Run Forward
Local:2:I.Data.0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 0 - Run Fwd
Command
FENA_ACSM1_O_ASSY_123.Run_FWD

1

Run Reverse
Local:2:I.Data.1

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 1 - Run Rev
Command
FENA_ACSM1_O_ASSY_123.Run_REV

2

Fault Reset
Local:2:I.Data.2

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
Bit 2 - Fault Reset
Request
FENA_ACSM1_O_ASSY_123.Fault_Reset

3

Speed referance will be in RPM's

DIV
Divide
Source A Local:1:I.Ch0Data
10112
Source B ACSM1_Ref_Divider_1_ENet
17.63555
Dest ACSM1_Ref1_Total_ENet
0

MOV
Move
Source ACSM1_Ref1_Total_ENet
0
Dest FENA_ACSM1_O_ASSY_123.Speed_Ref
0

ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref,
Trq Ref, 10 Data
Words
+/- Speed Reference
(See documentation
for scaling)

Actual Speed will be in RPM's

4

MOV
Move
Source FENA_ACSM1_I_ASSY_173.Actual_Speed
0
Dest FENA_ACSM1_Actual_Speed
0

(End)

0
JSR
Jump To Subroutine
Routine Name UDT_PROGRAM

1
JSR
Jump To Subroutine
Routine Name ACS350_ACS355_Control_Enet

2
JSR
Jump To Subroutine
Routine Name ACS380_Control_Enet

3
JSR
Jump To Subroutine
Routine Name ACS550_Control_Enet

4
JSR
Jump To Subroutine
Routine Name ACS580_Control_Enet

5
JSR
Jump To Subroutine
Routine Name ACS800_Control_Enet

6
JSR
Jump To Subroutine
Routine Name ACS850_Control_Enet

7
JSR
Jump To Subroutine
Routine Name ACS880_Control_Enet

8
JSR
Jump To Subroutine
Routine Name ACSM1_Control_Enet

(End)

0

File Name:
ABB_AOI_173_123_13W

ABB_8

File Name: ABB_AOI_173_123_13W	
ABB_8	FENA_ADD_ON_PROFILE_ACS350_355 ...
AB_COMM_MODULE_I	FENA_ACS350_355_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	FENA_ACS350_355_ODVA_PROFILE:O.Data
ABB_UDT_173	FENA_ACS350_355_I_ASSY_173
ABB_UDT_123	FENA_ACS350_355_O_ASSY_123
StatusWord	16#0370
ControlWord	16#0000

1

File Name:
ABB_AOI_171_121_6W
Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user

ABB_6

File Name: ABB_AOI_171_121_6W	Note: Assembly consists of custo...
ABB_6	RETA_ADD_ON_PROFILE_ACS800 ...
AB_COMM_MODULE_I	RETA_ACS800_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	RETA_ACS800_ODVA_PROFILE:O.Data
ABB_UDT_171_6	RETA_ACS800_I_ASSY_171
ABB_UDT_121_6	RETA_ACS800_O_ASSY_121
StatusWord	16#0370
ControlWord	16#0000

2

File Name:
ABB_AOI_171_121_6W
Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user

ABB_6

File Name: ABB_AOI_171_121_6W	Note: Assembly consists of custo...
ABB_6	RETA_ADD_ON_PROFILE_ACS550 ...
AB_COMM_MODULE_I	RETA_ACS550_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	RETA_ACS550_ODVA_PROFILE:O.Data
ABB_UDT_171_6	RETA_ACS550_I_ASSY_171
ABB_UDT_121_6	RETA_ACS550_O_ASSY_121
StatusWord	16#0370
ControlWord	16#0000

3

File Name:
ABB_AOI_173_123_13W

ABB_8

File Name: ABB_AOI_173_123_13W	
ABB_8	FENA_ADD_ON_PROFILE_ACS880 ...
AB_COMM_MODULE_I	FENA_ACS880_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	FENA_ACS880_ODVA_PROFILE:O.Data
ABB_UDT_173	FENA_ACS880_I_ASSY_173
ABB_UDT_123	FENA_ACS880_O_ASSY_123
StatusWord	16#0000
ControlWord	16#0000

4

File Name:
ABB_AOI_173_123_13W

ABB_8

File Name: ABB_AOI_173_123_13W	
ABB_8	FENA_ADD_ON_PROFILE_ACS380 ...
AB_COMM_MODULE_I	FENA_ACS380_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	FENA_ACS380_ODVA_PROFILE:O.Data
ABB_UDT_173	FENA_ACS380_I_ASSY_173
ABB_UDT_123	FENA_ACS380_O_ASSY_123
StatusWord	16#0000
ControlWord	16#0000

5

File Name:
ABB_AOI_173_123_13W

ABB_8

File Name: ABB_AOI_173_123_13W	
ABB_8	FENA_ADD_ON_PROFILE_ACS850 ...
AB_COMM_MODULE_I	FENA_ACS850_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	FENA_ACS850_ODVA_PROFILE:O.Data
ABB_UDT_173	FENA_ACS850_I_ASSY_173
ABB_UDT_123	FENA_ACS850_O_ASSY_123
StatusWord	16#0000
ControlWord	16#0000

6

File Name:
ABB_AOI_173_123_13W

ABB_8

File Name: ABB_AOI_173_123_13W	
ABB_8	FENA_ADD_ON_PROFILE_ACSM1 ...
AB_COMM_MODULE_I	FENA_ACSM1_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	FENA_ACSM1_ODVA_PROFILE:O.Data
ABB_UDT_173	FENA_ACSM1_I_ASSY_173
ABB_UDT_123	FENA_ACSM1_O_ASSY_123
StatusWord	16#0000
ControlWord	16#0000

7

File Name:
ABB_AOI_173_123_13W

ABB_8

File Name: ABB_AOI_173_123_13W	
ABB_8	FENA_ADD_ON_PROFILE_ACS580 ...
AB_COMM_MODULE_I	FENA_ACS580_ODVA_PROFILE:I.Data
AB_COMM_MODULE_O	FENA_ACS580_ODVA_PROFILE:O.Data
ABB_UDT_173	FENA_ACS580_I_ASSY_173
ABB_UDT_123	FENA_ACS580_O_ASSY_123
StatusWord	16#0000
ControlWord	16#0000

(End)

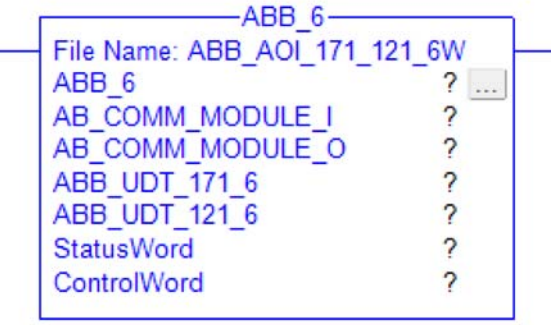
(End)

ABB_6 v1.0

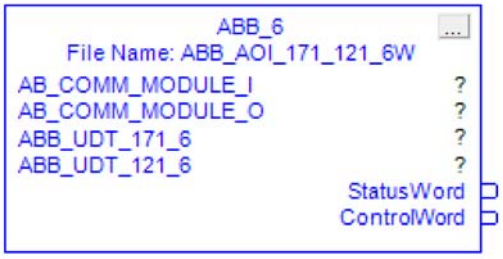
File Name: ABB_AOI_171_121_6W

Available Languages

Relay Ladder



Function Block



Structured Text

```
ABB_6(AB_COMM_MODULE_I, AB_COMM_MODULE_O, ABB_UDT_171_6, ABB_UDT_121_6);
```

Parameters

Required	Name	Data Type	Usage	Description
X	ABB_6	ABB_6	InOut	File Name: ABB_AOI_171_121_6W Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	AB_COMM_MODULE_I	INT	InOut	
X	AB_COMM_MODULE_O	INT	InOut	
X	ABB_UDT_171_6	ABB_UDT_171_6	InOut	
X	ABB_UDT_121_6	ABB_UDT_121_6	InOut	
	StatusWord	INT	Output	Status Word from Drive
	ControlWord	INT	Output	ControlWord to Drive

Extended Description

This AddOn instruction accomplishes three things:
1. Synchronously moves the plc commands and values to the drive; and the feedback from the drive to the plc.
2. Resets operate command bits in the plc pre-scan
3. Resets operate command bits and zeros references when EnableIn is false.
(EnableIn = False is never an intended use of this AddOn, and this feature is only included as a protective measure.)

Assembly: Extended speed control plus drive parameters assembly
Input Assy Instance: 171
Output Assy Instance: 121
Max Word Size: 6
Static/Dynamic: Dynamic
Profile Type: ODVA
Comm Module Type: FENA / RETA
File Name: ABB_AOI_171_121_6W
Instruction Name: ABB_6
Required User Defined Data Types: ABB_UDT_171_6, ABB_UDT_121_6

IMPORTANT: PreScan and EnableInFalse routines do not zero custom data, user must follow safe practices.

Execution

Condition	Description
EnableIn is false	Protection Logic for EnableIn False
EnableIn is true	Transfer data to and from the drive
Prescan	Prescan Logic Conditioning

Revision v1.0 Notes

Name	Default	Data Type	Scope
StatusWord	16#0000	INT	ABB_6
Status Word from Drive			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*StatusWord - ABB_6/Logic - *2(CPS)*			
AB_COMM_MODULE_I		INT[6]	ABB_6
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
AB_COMM_MODULE_I - ABB_6/Logic - 0(CPS)			
AB_COMM_MODULE_I[0] - ABB_6/Logic - 2(CPS)			
AB_COMM_MODULE_O		INT[6]	ABB_6
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*AB_COMM_MODULE_O - ABB_6/Logic - *1(CPS)*			
ControlWord	16#0000	INT	ABB_6
ControlWord to Drive			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*ControlWord - ABB_6/Logic - *2(CPS)*			
ABB_UDT_121_6		ABB_UDT_121_6	ABB_6
ODVA AC/DC Drive Output Instance 121 Size 6 INTs Cntrl Word, Spd Ref, + 4 Data Outputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
ABB_UDT_121_6 - ABB_6/Logic - 1(CPS), 2(CPS)			
*ABB_UDT_121_6.Run_FWD - ABB_6/EnableInFalse - *0(OTU)*			
*ABB_UDT_121_6.Run_FWD - ABB_6/Prescan - *0(OTU)*			
*ABB_UDT_121_6.Run_REV - ABB_6/EnableInFalse - *0(OTU)*			
*ABB_UDT_121_6.Run_REV - ABB_6/Prescan - *0(OTU)*			
*ABB_UDT_121_6.Speed_Ref - ABB_6/EnableInFalse - *1(MOV)*			
ABB_UDT_171_6		ABB_UDT_171_6	ABB_6
AC/DC Drive Profile Input Instance 171 Size 6 INTs Sts Word, Spd Fbk + 4 Data Inputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*ABB_UDT_171_6 - ABB_6/Logic - *0(CPS)*			

Name	Default	Data Type	Scope
No Tags Exist			

****
Copy Data from the Drive into the UDT Tag Structure
****

0

AC/DC Drive Profile
Input Instance 171
Size 6 INTs
Sts Word, Spd Fbk
+ 4 Data Inputs

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[0]
Dest ABB_UDT_171_6
Length 6

****
Copy Data from the UDT Tag Structure to the Drive
****

1

CPS
Synchronous Copy File
Source ABB_UDT_121_6
Dest AB_COMM_MODULE_O[0]
Length 6

****
Populate Control and Status Words
****

2

Status Word from
Drive

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[0]
Dest StatusWord
Length 1

ControlWord to Drive

CPS
Synchronous Copy File
Source ABB_UDT_121_6
Dest ControlWord
Length 1

(End)

****
****
Make sure Run Commands are reset prior to first scan
****
****

0

ODVA AC/DC Drive Output Instance 121 Size 6 INTs Cntrl Word, Spd Ref, + 4 Data Outputs Bit 0 - Run Fwd Command ABB_UDT_121_6.Run_FWD	ODVA AC/DC Drive Output Instance 121 Size 6 INTs Cntrl Word, Spd Ref, + 4 Data Outputs Bit 1 - Run Rev Command ABB_UDT_121_6.Run_REV
U	U

(End)

****
****
Reset Run Commands and Zero reference on loss of EnableIn
****
****

0

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 0 - Run Fwd
Command
ABB_UDT_121_6.Run_FWD
U

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
Bit 1 - Run Rev
Command
ABB_UDT_121_6.Run_REV
U

1

ODVA AC/DC Drive
Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref,
+ 4 Data Outputs
+/- Speed Reference
(See documentation
for scaling)

MOV
Move
Source 0
Dest ABB_UDT_121_6.Speed_Ref
??

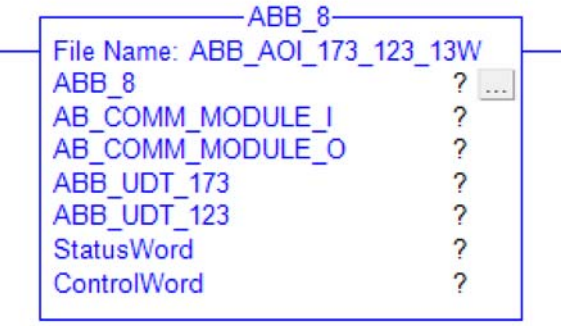
(End)

ABB_8 v1.0

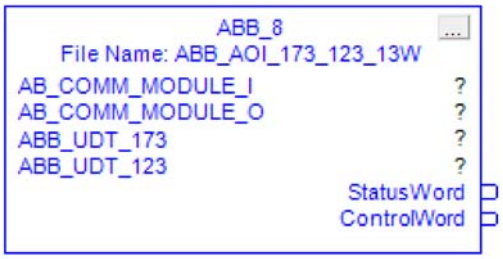
File Name: ABB_AOI_173_123_13W

Available Languages

Relay Ladder



Function Block



Structured Text

```
ABB_8(AB_COMM_MODULE_I, AB_COMM_MODULE_O, ABB_UDT_173, ABB_UDT_123);
```

Parameters

Required	Name	Data Type	Usage	Description
X	ABB_8	ABB_8	InOut	File Name: ABB_AOI_173_123_13W
	EnableIn	BOOL	Input	
	EnableOut	BOOL	Output	
X	AB_COMM_MODULE_I	INT	InOut	
X	AB_COMM_MODULE_O	INT	InOut	
X	ABB_UDT_173	ABB_UDT_173	InOut	
X	ABB_UDT_123	ABB_UDT_123	InOut	
	StatusWord	INT	Output	Status Word from Drive
	ControlWord	INT	Output	ControlWord to Drive

Extended Description

This AddOn instruction accomplishes three things:
1. Synchronously moves the plc commands and values to the drive; and the feedback from the drive to the plc.
2. Resets operate command bits in the plc pre-scan
3. Resets operate command bits and zeros references when EnableIn is false.
(EnableIn = False is never an intended use of this AddOn, and this feature is only included as a protective measure.)

Input Assy Instance: 173
Output Assy Instance: 123
Max Word Size: 13
Static/Dynamic: Dynamic
Profile Type: ODVA
Comm Module Type: FENA
File Name: ABB_AOI_173_123_13W
Instruction Name: ABB_8
Required User Defined Data Types: ABB_UDT_173, ABB_UDT_123
Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user

Execution

Condition	Description
EnableIn is false	Protection Logic for EnableIn False
EnableIn is true	Transfer data to and from the drive
Prescan	Prescan Logic Conditioning

Revision v1.0 Notes

Name	Default	Data Type	Scope
StatusWord	16#0000	INT	ABB_8
Status Word from Drive			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*StatusWord - ABB_8/Logic - *2(CPS)*			
AB_COMM_MODULE_I		INT[13]	ABB_8
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
AB_COMM_MODULE_I - ABB_8/Logic - 0(CPS)			
AB_COMM_MODULE_I[0] - ABB_8/Logic - 2(CPS)			
AB_COMM_MODULE_O		INT[13]	ABB_8
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*AB_COMM_MODULE_O - ABB_8/Logic - *1(CPS)*			
ControlWord	16#0000	INT	ABB_8
ControlWord to Drive			
Usage:	Output Parameter		
Required:	No		
Visible:	Yes		
*ControlWord - ABB_8/Logic - *2(CPS)*			
ABB_UDT_123		ABB_UDT_123	ABB_8
ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
ABB_UDT_123 - ABB_8/Logic - 1(CPS), 2(CPS)			
*ABB_UDT_123.Run_FWD - ABB_8/EnableInFalse - *0(OTU)*			
*ABB_UDT_123.Run_FWD - ABB_8/Prescan - *0(OTU)*			
*ABB_UDT_123.Run_REV - ABB_8/EnableInFalse - *0(OTU)*			
*ABB_UDT_123.Run_REV - ABB_8/Prescan - *0(OTU)*			
*ABB_UDT_123.Speed_Ref - ABB_8/EnableInFalse - *1(MOV)*			
*ABB_UDT_123.Torque_Ref - ABB_8/EnableInFalse - *1(MOV)*			
ABB_UDT_173		ABB_UDT_173	ABB_8
ODVA AC/DC Drive Input Instance 173 Size 13 INTs Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs			
Usage:	InOut Parameter		
Required:	Yes		
Visible:	Yes		
*ABB_UDT_173 - ABB_8/Logic - *0(CPS)*			

Name	Default	Data Type	Scope
No Tags Exist			

****
****
Copy Data from the Drive into the UDT Tag Structure
****
****

0

ODVA AC/DC Drive
Input Instance 173
Size 13 INTs
Sts Word, Spd Fbk,
Trq Fbk +10 Data
Inputs

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[0]
Dest ABB_UDT_173
Length 13

****
****
Copy Data from the UDT Tag Structure to the Drive
****
****

1

CPS
Synchronous Copy File
Source ABB_UDT_123
Dest AB_COMM_MODULE_O[0]
Length 13

****
****
Populate Control and Status Words
****
****

2

Status Word from
Drive

CPS
Synchronous Copy File
Source AB_COMM_MODULE_I[0]
Dest StatusWord
Length 1

ControlWord to Drive

CPS
Synchronous Copy File
Source ABB_UDT_123
Dest ControlWord
Length 1

(End)

****
****
Make sure Run Commands are reset prior to first scan
****
****

0

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words Bit 1 - Run Rev Command	ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words Bit 0 - Run Fwd Command
ABB_UDT_123.Run_REV	ABB_UDT_123.Run_FWD
U	U

(End)

****
****
Reset Run Commands and Zero reference on loss of EnableIn
****
****

0

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words Bit 1 - Run Rev Command
ABB_UDT_123.Run_REV
U

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words Bit 0 - Run Fwd Command
ABB_UDT_123.Run_FWD
U

1

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words +/- Torque Reference (See documentation for Scaling)

MOV
Move
Source 0
Dest ABB_UDT_123.Torque_Ref
??

ODVA AC/DC Drive Output Instance 123 Size 13 INTs Cntrl Word, Spd Ref, Trq Ref, 10 Data Words +/- Speed Reference (See documentation for scaling)

MOV
Move
Source 0
Dest ABB_UDT_123.Speed_Ref
??

(End)

Data type Name: ABB_UDT_121_6

Description:
ODVA AC/DC Drive Output Instance 121
Size 6 INTs
Cntrl Word, Spd Ref, + 4 Data Outputs

Size: 12 byte(s)

Name	Data Type	Style	Description
Run_FWD	BOOL	Decimal	Bit 0 - Run Fwd Command
Run_REV	BOOL	Decimal	Bit 1 - Run Rev Command
Fault_Reset	BOOL	Decimal	Bit 2 - Fault Reset Request
Drive_Ctrl_B3	BOOL	Decimal	Bit 3 - Unused
Drive_Ctrl_B4	BOOL	Decimal	Bit 4 - Unused
Net_CTRL	BOOL	Decimal	Bit 5 - Drive Contrl from Network
Net_Ref	BOOL	Decimal	Bit 6 - Drive Ref from Network
Speed_Ref	INT	Decimal	+/- Speed Reference (See documentation for scaling)
Custom_Out_01	INT	Decimal	Custom Data to Drive Value #01
Custom_Out_02	INT	Decimal	Custom Data to Drive Value #02
Custom_Out_03	INT	Decimal	Custom Data to Drive Value #03
Custom_Out_04	INT	Decimal	Custom Data to Drive Value #04

Data type Name: ABB_UDT_123

Description:
ODVA AC/DC Drive
Output Instance 123
Size 13 INTs
Cntrl Word, Spd Ref, Trq Ref, 10 Data Words

Size: 28 byte(s)

Name	Data Type	Style	Description
Run_FWD	BOOL	Decimal	Bit 0 - Run Fwd Command
Run_REV	BOOL	Decimal	Bit 1 - Run Rev Command
Fault_Reset	BOOL	Decimal	Bit 2 - Fault Reset Request
Drive_Ctrl_B3	BOOL	Decimal	Bit 3 - Unused
Drive_Ctrl_B4	BOOL	Decimal	Bit 4 - Unused
Net_CTRL	BOOL	Decimal	Bit 5 - Drive Contrl from Network
Net_Ref	BOOL	Decimal	Bit 6 - Drive Ref from Network
Speed_Ref	INT	Decimal	+/- Speed Reference (See documentation for scaling)
Torque_Ref	INT	Decimal	+/- Torque Reference (See documentation for Scaling)
Custom_Out_01	INT	Decimal	Custom Data to Drive Value #01
Custom_Out_02	INT	Decimal	Custom Data to Drive Value #02
Custom_Out_03	INT	Decimal	Custom Data to Drive Value #03
Custom_Out_04	INT	Decimal	Custom Data to Drive Value #04
Custom_Out_05	INT	Decimal	Custom Data to Drive Value #05
Custom_Out_06	INT	Decimal	Custom Data to Drive Value #06
Custom_Out_07	INT	Decimal	Custom Data to Drive Value #07
Custom_Out_08	INT	Decimal	Custom Data to Drive Value #08
Custom_Out_09	INT	Decimal	Custom Data to Drive Value #09
Custom_Out_10	INT	Decimal	Custom Data to Drive Value #10

Data type Name: ABB_UDT_171_6

Description:
AC/DC Drive Profile
Input Instance 171
Size 6 INTs
Sts Word, Spd Fbk
+ 4 Data Inputs

Size: 12 byte(s)

Name	Data Type	Style	Description
Faulted	BOOL	Decimal	Bit 0 - Faulted Status
Warning	BOOL	Decimal	Bit 1 - Warning Status
Running_FWD	BOOL	Decimal	Bit 2 - Running Fwd Status
Running_REV	BOOL	Decimal	Bit 3 - Running Rev Status
Ready	BOOL	Decimal	Bit 4 - Drive Ready Status
CTR_From_Net	BOOL	Decimal	Bit 5 - Drive Contrl from Network Status
REF_From_Net	BOOL	Decimal	Bit 6 - Drive Ref from Network Status
AT_REF	BOOL	Decimal	Bit 7 - Drive At Reference Status
Drive_State	SINT	Decimal	Control Supervisory States: 0 Vendor Specific 1 Startup 2 Not Ready Stop 3 Ready 4 Enabled 5 Stopping 6 Fault 7 Faulted
Actual_Speed	INT	Decimal	+/- Speed Feedback (See documentation for scaling)
Custom_Input_01	INT	Decimal	Custom Data from Drive Value #01
Custom_Input_02	INT	Decimal	Custom Data from Drive Value #02
Custom_Input_03	INT	Decimal	Custom Data from Drive Value #03
Custom_Input_04	INT	Decimal	Custom Data from Drive Value #04

Data type Name: ABB_UDT_173

Description:
ODVA AC/DC Drive
Input Instance 173
Size 13 INTs
Sts Word, Spd Fbk, Trq Fbk +10 Data Inputs

Size: 28 byte(s)

Name	Data Type	Style	Description
Faulted	BOOL	Decimal	Bit 0 - Faulted Status
Warning	BOOL	Decimal	Bit 1 - Warning Status
Running_FWD	BOOL	Decimal	Bit 2 - Running Fwd Status
Running_REV	BOOL	Decimal	Bit 3 - Running Rev Status
Ready	BOOL	Decimal	Bit 4 - Drive Ready Status
CTR_From_Net	BOOL	Decimal	Bit 5 - Drive Contrl from Network Status
REF_From_Net	BOOL	Decimal	Bit 6 - Drive Ref from Network Status
AT_REF	BOOL	Decimal	Bit 7 - Drive At Reference Status
Drive_State	SINT	Decimal	Control Supervisory States: 0 Vendor Specific 1 Startup 2 Not Ready Stop 3 Ready 4 Enabled 5 Stopping 6 Fault 7 Faulted
Actual_Speed	INT	Decimal	+/- Speed Feedback (See documentation for scaling)
Actual_Torque	INT	Decimal	+/- Torque Feedback (See documentation for scaling)
Custom_Input_01	INT	Decimal	Custom Data from Drive Value #01
Custom_Input_02	INT	Decimal	Custom Data from Drive Value #02
Custom_Input_03	INT	Decimal	Custom Data from Drive Value #03
Custom_Input_04	INT	Decimal	Custom Data from Drive Value #04
Custom_Input_05	INT	Decimal	Custom Data from Drive Value #05
Custom_Input_06	INT	Decimal	Custom Data from Drive Value #06
Custom_Input_07	INT	Decimal	Custom Data from Drive Value #07
Custom_Input_08	INT	Decimal	Custom Data from Drive Value #08
Custom_Input_09	INT	Decimal	Custom Data from Drive Value #09
Custom_Input_10	INT	Decimal	Custom Data from Drive Value #10

Data type Name: ABB_6

Description:
File Name: ABB_AOI_171_121_6W
Note: Assembly consists of custom data. Pre-scan and enable-in-false are responsibility of user

Size: 8 byte(s)

Name	Data Type	Style	Description
EnableIn	BOOL	Decimal	Enable Input - System Defined Parameter
EnableOut	BOOL	Decimal	Enable Output - System Defined Parameter
StatusWord	INT	Hex	Status Word from Drive
ControlWord	INT	Hex	ControlWord to Drive

Data type Name: ABB_8

Description:
File Name: ABB_AOI_173_123_13W

Size: 8 byte(s)

Name	Data Type	Style	Description
EnableIn	BOOL	Decimal	Enable Input - System Defined Parameter
EnableOut	BOOL	Decimal	Enable Output - System Defined Parameter
StatusWord	INT	Hex	Status Word from Drive
ControlWord	INT	Hex	ControlWord to Drive

Data type Name: STRING

Description:

Size: 88 byte(s)

Name	Data Type	Style	Description
LEN	DINT	Decimal	
DATA	SINT[82]	ASCII	