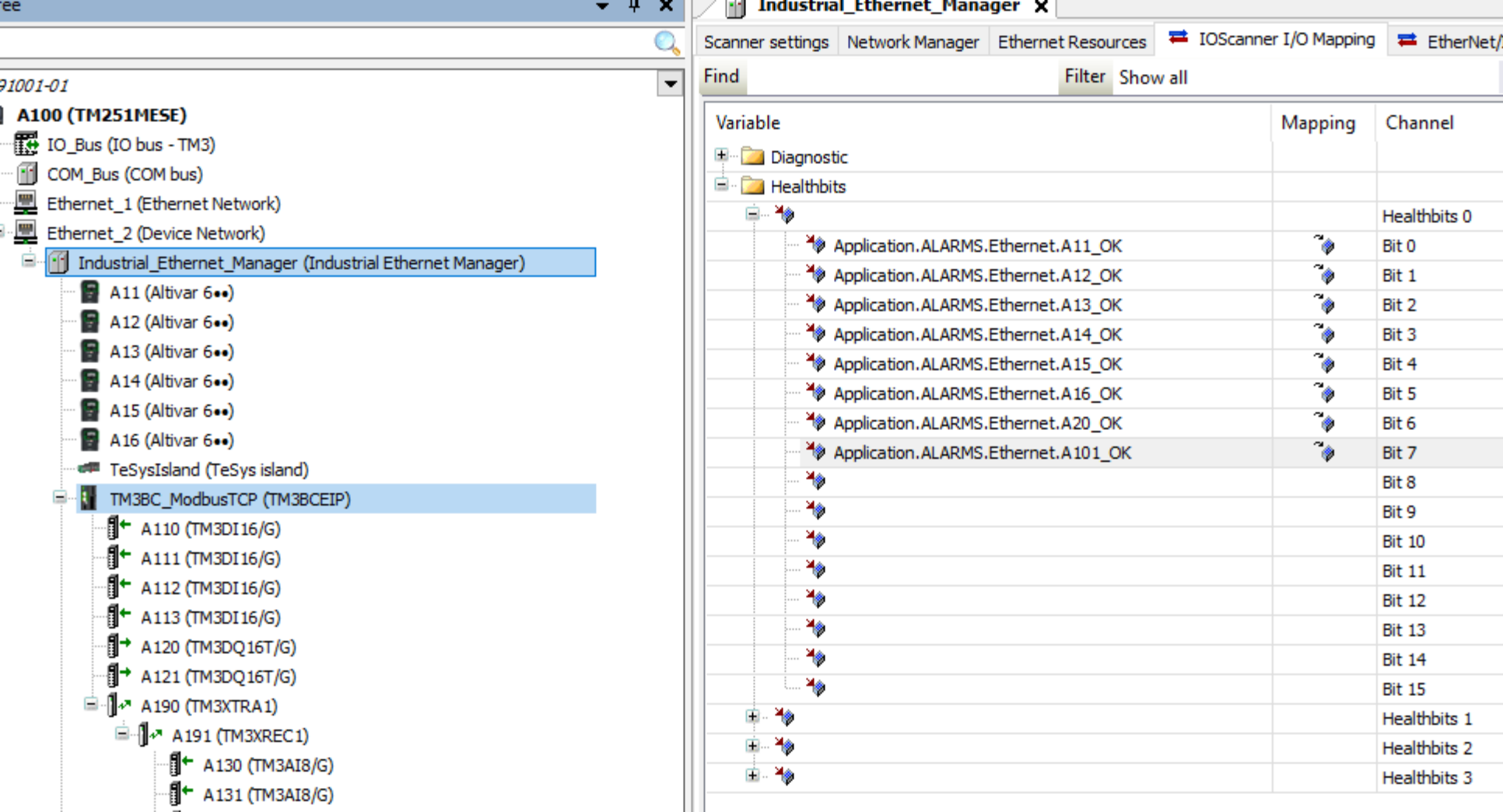
91001-01
A100 (TM251MESE)
IO_Bus (IO bus - TM3)
COM_Bus (COM bus)
Ethernet_1 (Ethernet Network)
Ethernet_2 (Device Network)
Industrial_Ethernet_Manager (Industrial Ethernet Manager)
A11 (Altivar 6••)
A12 (Altivar 6••)
A13 (Altivar 6••)
A14 (Altivar 6••)
A15 (Altivar 6••)
A16 (Altivar 6••)
TeSysIsland (TeSys island)
TM3BC_ModbusTCP (TM3BCEIP)
A110 (TM3DI16/G)
A111 (TM3DI16/G)
A112 (TM3DI16/G)
A113 (TM3DI16/G)
A120 (TM3DQ16T/G)
A121 (TM3DQ16T/G)
A190 (TM3XTRA1)
A191 (TM3XREC1)
A130 (TM3AI8/G)
A131 (TM3AI8/G)
Industrial_Ethernet_Manager
Scanner settings
Network Manager
Ethernet Resources
IOScanner I/O Mapping
Find
Filter
Show all
Variable
Mapping
Channel
Diagnostic
Healthbits
Healthbits 0
Application.ALARMS.Ethernet.A11_OK
Bit 0
Application.ALARMS.Ethernet.A12_OK
Bit 1
Application.ALARMS.Ethernet.A13_OK
Bit 2
Application.ALARMS.Ethernet.A14_OK
Bit 3
Application.ALARMS.Ethernet.A15_OK
Bit 4
Application.ALARMS.Ethernet.A16_OK
Bit 5
Application.ALARMS.Ethernet.A20_OK
Bit 6
Application.ALARMS.Ethernet.A101_OK
Bit 7
Bit 8
Bit 9
Bit 10
Bit 11
Bit 12
Bit 13
Bit 14
Bit 15
Healthbits 1
Healthbits 2
Healthbits 3

```
    TM3_Read            : READ_VAR;                 //Functionblock to read TM3 status
    TM3_GetAdr          : ADDM;                     //Function block for address conversion
    TM3_Timer           : TON;                      //Timer for control of TM3 status reading
    TM3_Pulse           : TP;                       //Generate trigger pulse for reading TMR status
    TM3_Adr             : ADDRESS;                  //Converted address for TM3 interface module
    TM3_ReadStat        : BOOL;                     //Read status from TM3 interface module
    TM3_StatusBuf       : ARRAY [0..1] OF WORD;     //Buffer for TM3 Island status
    TM3_StatBit         : WORD_AS_BIT;              //Extract status bits from status word
```

```
//Read status information from TM3 remote IO module every 10 second
    TM3_Timer(  IN      := NOT TM3_ReadStat,
                PT      := T#10S);
    TM3_Pulse(  IN      :=  TM3_Timer.Q,
                PT      :=  T#500MS,
                Q       =>  TM3_ReadStat);
    TM3_GetAdr( AddrTable   := TM3_Adr,
                Execute     := TM3_ReadStat,
                Addr        := '3{192.168.2.18}');

    TM3_Read(   Execute     := TM3_ReadStat AND TM3_GetAdr.Done,
                Addr        := TM3_Adr,
                Timeout     := 5,
                ObjType     := 0,
                FirstObj    := 901,
                Quantity    := 1,
                Buffer      := ADR(TM3_StatusBuf));
    TM3_StatBit(W := TM3_StatusBuf[0]);
```

PRG_Alarms.A_TM3

```
1  //Check alarm condition for TM3 IO modules
2  //Alarm on one or more IO modules
3  ALARMS.TM3.OK       :=  ( TM3_StatusBuf[0] = 0);
4  //Digital input modules
5  ALARMS.TM3.A110     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B00;
6  ALARMS.TM3.A111     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B01;
7  ALARMS.TM3.A112     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B02;
8  ALARMS.TM3.A113     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B03;
9  //Digital output modules
10 ALARMS.TM3.A120     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B04;
11 ALARMS.TM3.A121     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B05;
12 //Analog input modules
13 ALARMS.TM3.A130     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B06;
14 ALARMS.TM3.A131     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B07;
15 ALARMS.TM3.A132     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B08;
16 //Analog otput modules
17 ALARMS.TM3.A140     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B09;
18 ALARMS.TM3.A141     :=  ALARMS.Ethernet.A101_OK AND TM3_StatBit.B10;
19
```