

```

# A01C1          Weiverwerking
# funktie        berekent onderbrekingen in het H1-netwerk
#               0 = fout
#               1 = plaats van de eindweerstand
#               2 = goed
# datum         14-5-2001
# Auteur        Randy Simons / Hans Mangnus / Coen de Krom

DECLARE SHORT S[100]
DECLARE SHORT n

PROC h1_net

BEGIN
# Reset status kabels
  n = 0
  WHILE n < 40
    S[n] = 0
    n = n + 1
  WEND

# Controle naar de PLC's, dit is onafhankelijk van de flapp en
# onafhankelijk van de plaats van de eindweerstand.
  n = 0
  WHILE n < 15
    IF h1_alarm[n] = 0 THEN S[20+n] = 2 ; ENDIF
    n = n + 1
  WEND

# Controleer communicatie tussen DPI en de rest op het H1 netwerk.
  IF h1_alarm[11] = 0 OR h1_alarm[12] = 0 OR h1_alarm[13] = 0 THEN
    S[37] = 2
  ENDIF

# Controleer communicatie tussen 1B1P2 <-> G28P1 en A05P1 <-> G28P1
  IF km[3][70] < 128 AND km[6][68] < 128 THEN
    S[38] = 2
  ENDIF

# Controleer communicatie van het H1-koppelnet
  IF km[8][541] < 128 THEN
    S[39] = 2
  ENDIF

# Controleer communicatie van het DATA-koppelnet (nog niet mogelijk, wel voorbereid)
#   IF km[8][542] < 128 THEN
#     S[x] = 2
#   ENDIF

#-----
#
# FL1 is master:
#
#-----

IF server = "Server 1" THEN
  # als communicatie met A02P6 (PLC 8) of een van de DPI plc's (PLC 11, 12 of 13)

```

in bedrijf:

```
    IF h1_alarm[8] = 0 OR h1_alarm[11] = 0 OR h1_alarm[12] = 0 OR h1_alarm[13] = 0
THEN
    IF h1_eindweerstand = 13 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
    ELSE
        S[13] = 2
    ENDIF
ENDIF
ENDIF
```

als communicatie met A01P1 (PLC 0) of met A01P2 (PLC 2) in bedrijf:

```
IF h1_alarm[0] = 0 OR h1_alarm[2] = 0 THEN
    IF h1_eindweerstand >= 12 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
    ELSE
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF
ENDIF
```

als communicatie met A05P1 (PLC 6) in bedrijf:

```
IF h1_alarm[6] = 0 THEN
    IF h1_eindweerstand >= 11 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
    ELSE
        S[11] = 2
        S[12] = 2
    ENDIF
ENDIF
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        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 2A2P3 (PLC 5) in bedrijf:
IF h1_alarm[5] = 0 THEN
    IF h1_eindweerstand >= 9 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
    ELSE
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B2P2 (PLC 10) in bedrijf:
IF h1_alarm[10] = 0 THEN
    IF h1_eindweerstand >= 7 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
    ELSE
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B1P2 (PLC 3) in bedrijf:
IF h1_alarm[3] = 0 THEN
    IF h1_eindweerstand >= 6 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
    ELSE
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
    ENDIF
ENDIF
```

```
S[10] = 2
S[11] = 2
S[12] = 2
S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B1P4 (PLC 4) of met 1B1P5 (PLC 14) in bedrijf:
IF h1_alarm[4] = 0 OR h1_alarm[14] = 0 THEN
    IF h1_eindweerstand >= 5 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
        S[4] = 2
    ELSE
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B1P3 (PLC 9) in bedrijf:
IF h1_alarm[9] = 0 THEN
    IF h1_eindweerstand >= 4 THEN
        S[1] = 2
        S[2] = 2
        S[3] = 2
    ELSE
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met A02P9 (PLC 1) in bedrijf:
IF h1_alarm[1] = 0 THEN
    IF h1_eindweerstand >= 3 THEN
        S[1] = 2
        S[2] = 2
    ELSE
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
    ENDIF
ENDIF
```

```
S[7] = 2
S[8] = 2
S[9] = 2
S[10] = 2
S[11] = 2
S[12] = 2
S[13] = 2
    ENDIF
ENDIF

ENDIF

#-----
#
# FL2 is master:
#
#-----

IF server = "Server 2" THEN
    # als communicatie met A02P6 (PLC 8) of een van de DPI plc's (PLC 11, 12 of 13)
    in bedrijf:
    IF h1_alarm[8] = 0 OR h1_alarm[11] = 0 OR h1_alarm[12] = 0 OR h1_alarm[13] = 0
THEN
        IF h1_eindweerstand = 13 OR h1_eindweerstand = 1 THEN
            S[2] = 2
            S[3] = 2
            S[4] = 2
            S[5] = 2
            S[6] = 2
            S[7] = 2
            S[8] = 2
            S[9] = 2
            S[10] = 2
            S[11] = 2
            S[12] = 2
        ELSE
            S[1] = 2
            S[13] = 2
        ENDIF
    ENDIF
ENDIF

# als communicatie met A01P1 (PLC 0) of met A01P2 (PLC 2) in bedrijf:
IF h1_alarm[0] = 0 OR h1_alarm[2] = 0 THEN
    IF h1_eindweerstand >= 12 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
    ELSE
        S[1] = 2
    ENDIF
ENDIF
```

```
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met A05P1 (PLC 6) in bedrijf:
IF h1_alarm[6] = 0 THEN
    IF h1_eindweerstand >= 11 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
    ELSE
        S[1] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 2A2P3 (PLC 5) in bedrijf:
IF h1_alarm[5] = 0 THEN
    IF h1_eindweerstand >= 9 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
    ELSE
        S[1] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B2P2 (PLC 10) in bedrijf:
IF h1_alarm[10] = 0 THEN
    IF h1_eindweerstand >= 7 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
    ELSE
        S[1] = 2
        S[7] = 2
        S[8] = 2
    ENDIF
ENDIF
```

```
S[9] = 2
S[10] = 2
S[11] = 2
S[12] = 2
S[13] = 2
ENDIF
ENDIF

# als communicatie met 1B1P2 (PLC 3) in bedrijf:
IF h1_alarm[3] = 0 THEN
    IF h1_eindweerstand >= 6 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
    ELSE
        S[1] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B1P4 (PLC 4) of 1B1P5 (PLC 14) in bedrijf:
IF h1_alarm[4] = 0 OR h1_alarm[14] = 0 THEN
    IF h1_eindweerstand >= 5 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
        S[4] = 2
    ELSE
        S[1] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

# als communicatie met 1B1P3 (PLC 9) in bedrijf:
IF h1_alarm[9] = 0 THEN
    IF h1_eindweerstand >= 4 OR h1_eindweerstand = 1 THEN
        S[2] = 2
        S[3] = 2
    ELSE
        S[1] = 2
        S[4] = 2
        S[5] = 2
    ENDIF
ENDIF
```

```
S[6] = 2
S[7] = 2
S[8] = 2
S[9] = 2
S[10] = 2
S[11] = 2
S[12] = 2
S[13] = 2
    ENDIF
ENDIF

# als communicatie met A02P9 (PLC 1) in bedrijf:
IF h1_alarm[1] = 0 THEN
    IF h1_eindweerstand >= 3 OR h1_eindweerstand = 1 THEN
        S[2] = 2
    ELSE
        S[1] = 2
        S[3] = 2
        S[4] = 2
        S[5] = 2
        S[6] = 2
        S[7] = 2
        S[8] = 2
        S[9] = 2
        S[10] = 2
        S[11] = 2
        S[12] = 2
        S[13] = 2
    ENDIF
ENDIF

ENDIF

# Verkleur plaats waar eindweerstand zit
# De verbinding met het koppelnet en met 1B2P2 zijn er nog niet. Dit is al wel
# voorbereid.
IF h1_eindweerstand = 1 THEN S[1] = 1 ; ENDIF
IF h1_eindweerstand = 2 THEN S[2] = 1 ; ENDIF
IF h1_eindweerstand = 3 THEN S[3] = 1 ; ENDIF
IF h1_eindweerstand = 4 THEN S[4] = 1 ; ENDIF
IF h1_eindweerstand = 5 THEN S[5] = 1 ; ENDIF
IF h1_eindweerstand = 6 THEN S[6] = 1 ; ENDIF
IF h1_eindweerstand = 7 THEN S[7] = 1 ; ENDIF
IF h1_eindweerstand = 8 THEN S[8] = 1 ; ENDIF
IF h1_eindweerstand = 9 THEN S[9] = 1 ; ENDIF
IF h1_eindweerstand = 10 THEN S[10] = 1 ; ENDIF
IF h1_eindweerstand = 11 THEN S[11] = 1 ; ENDIF
IF h1_eindweerstand = 12 THEN S[12] = 1 ; ENDIF
IF h1_eindweerstand = 13 THEN S[13] = 1 ; ENDIF

# Copieer de gevonden waarden naar h1_kabel[...]
n = 0
WHILE n < 40
    h1_kabel[n] = S[n]
    n = n + 1
WEND
```

END