

# Signal sources for ZSW1 im Interface Mode SINAMICS (p2038 = 0)

&lt;1&gt;

| Signal  | Meaning                                                                           | Interconnection parameters | [Function diagram] Internal status word | [Function diagram] signal source | Inverted <2> |
|---------|-----------------------------------------------------------------------------------|----------------------------|-----------------------------------------|----------------------------------|--------------|
| ZSW1.0  | 1 = Ready to power-up                                                             | p2080[0] = r0899.0         | [2503.7]                                | [2610]                           | -            |
| ZSW1.1  | 1 = Ready to operate                                                              | p2080[1] = r0899.1         | [2503.7]                                | [2610]                           | -            |
| ZSW1.2  | 1 = Operation enabled                                                             | p2080[2] = r0899.2         | [2503.7]                                | [2610]                           | -            |
| ZSW1.3  | 1 = Fault present                                                                 | p2080[3] = r2139.3         | [2548.7]                                | [8060]                           | -            |
| ZSW1.4  | 1 = No coast down active (OFF2 inactive)                                          | p2080[4] = r0899.4         | [2503.7]                                | [2610]                           | -            |
| ZSW1.5  | 1 = No fast stop active (OFF3 inactive)                                           | p2080[5] = r0899.5         | [2503.7]                                | [2610]                           | -            |
| ZSW1.6  | 1 = Power-on inhibit active                                                       | p2080[6] = r0899.6         | [2503.7]                                | [2610]                           | -            |
| ZSW1.7  | 1 = Alarm present                                                                 | p2080[7] = r2139.7         | [2548.7]                                | [8065]                           | -            |
| ZSW1.8  | 1 = Speed setpoint - actual value deviation within tolerance t_off                | p2080[8] = r2197.7         | [2534.7]                                | [8010]                           | -            |
| ZSW1.9  | 1 = Control requested <3>                                                         | p2080[9] = r0899.9         | [2503.7]                                | [2503]                           | -            |
| ZSW1.10 | 1 = f or n comparison value reached/exceeded                                      | p2080[10] = r2199.1        | [2536.7]                                | [8010]                           | -            |
| ZSW1.11 | 1 = I, M, or P limit not reached <4>                                              | p2080[11] = r1407.7        | [2522.7]                                | [5610] [6060]                    | ✓            |
| ZSW1.12 | 1 = Open holding brake                                                            | p2080[12] = r0899.12       | [2503.7]                                | [2701]                           | -            |
| ZSW1.13 | 1 = No motor overtemperature alarm                                                | p2080[13] = r2135.14       | [2548.7]                                | [8016]                           | ✓            |
| ZSW1.14 | 1 = Motor rotates forwards (n_act ≥ 0)<br>0 = Motor rotates backwards (n_act < 0) | p2080[14] = r2197.3        | [2534.7]                                | [8010]                           | -            |
| ZSW1.15 | 1 = No alarm, thermal overload, power unit                                        | p2080[15] = r2135.15       | [2548.7]                                | [8014]                           | ✓            |

&lt;1&gt; Used in telegrams 1, 2, 3, 4, 5, 6, 7, 110, 352.

&lt;3&gt; The master system requests the process data.

&lt;2&gt; The ZSW1 is generated using the binector-connector converter (BI: p2080[0...15], inversion: p2088[0]...p2088[0].15)

&lt;4&gt; Not for VECTOR V/f.

| 1                                                         | 2 | 3 | 4 | 5 | 6                  | 7                | 8        |
|-----------------------------------------------------------|---|---|---|---|--------------------|------------------|----------|
| DO: SERVO, VECTOR                                         |   |   |   |   | fp_2452_01_eng.vsd | Function diagram | - 2452 - |
| PROFIdrive - ZSW1 status word interconnection (p2038 = 0) |   |   |   |   | 07.03.07 V02.05.00 | SINAMICS S       |          |