

4134255-02



DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

According to EC machinery directive 2006/42/EC, Annex II, Part 1, sector B for a partly completed machine

Manufacturer:

SEIKO EPSON CORPORATION 3-5, Owa 3-chome, Suwa-shi Nagano-ken 392-8502 Japan http://global.epson.com/company/ Entity placing on the market:

EPSON Deutschland GmbH. Mr. Volker Spanier Otto-Hahn-Straße 4 40670 Meerbusch Germany https://www.epson.eu

Attorney to compile the relevant technical documentation:

EPSON EUROPE B.V. Atlas Arena, Asia Building, Hoogoorddreef 5,1101 BA Amsterdam Zuidoost The Netherlands Telephone: 31-20-314-5000

The manufacturer undertakes to electronically supply the relevant technical documentation, referred to in Annex VII part B for the partly completed machinery, to national authorities upon reasoned request.

This partly completed machine must not be put into service until the machinery into which it is to be incorporated, has been declared in conformity with the provisions of the Machinery Directive.

The manufacturer/assignee confirms hereby that following product(s):

Product Name:

Model:

Industrial Robot

T3 series robots

T6 series robots VT6 series robots (Serial number T3**000001 - T3**ZZ9999) (Serial number T6**000001 - T6**ZZ9999)

(Serial number VT6*000001 - VT6*ZZ9999)

<Note> *: 0 - 9, A - Z



fulfil(s) the basic requirements of the Machinery Directive 2006/42/EC as listed in the attachment to this declaration of incorporation

Furthermore this partly completed machinery fulfils all relevant provisions of the directive:

Electromagnetic Compatibility (EMC)

2014/30/EU

Following harmonised norms and specifications are applied:

| EN 55011 | 2009/A1: 2010 | Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement |
|----------------|------------------|--|
| EN 61000-6-2 | 2005/AC: 2005 | Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments |
| EN ISO 12100 | 2010 | Safety of machinery – General principles for design – Risk assessment and risk reduction (ISO 12100:2010) |
| EN ISO 10218-1 | 2011 | Robots and robotic devices – Safety requirements for industrial robots – Part 1: Robots (ISO 10218-1:2011) |
| EN ISO 13849-1 | 2015 | Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design |
| EN ISO 13850 | 2015 | Safety of machinery - Emergency stop - Principles for design |
| EN 60204-1 | 2006 /A1:2009 | Safety of machinery - Electrical equipment of machines - Part 1: General requirements |

Hirofumi Tsuji

RS CS Quality Assurance Department

General Manager

(Place, Date)

Nagano-ken, 11.27.2018

(Signatory's surname, first name and position)

Ourofun Jong (Signature)



Annex to declaration of incorporation of partly completed machinery

for following product(s):

Product Name:

Model:

Industrial Robot

T3 series robots T6 series robots VT6 series robots (Serial number T3**000001 – T3**ZZ9999) (Serial number T6**000001 – T6**ZZ9999)

(Serial number VT6*000001 – VT6*ZZ9999) <Note> * : 0 - 9, A - Z

The following basic requirements of the **Machinery Directive 2006/42/EC** are applied and will be adhered. Appropriate items to be marked "X".

| Machinery Directive linie 2006/42/EG, Annex I - Essential health and safety requirements relating to the design and construction of machinery | Applicable and adhered C:Conform NC:Not conform NA:Not applicable | |
|---|---|--|
| Essential health and safety requirements | - | |
| 1.1. General | - | |
| 1.1.1. Definitions | - | |
| 1.1.2. Principles of safety integration | С | |
| 1.1.3. Materials and products used | С | |
| 1.1.4. Integral lighting | NA | |
| 1.1.5. Handling of machinery and parts of machinery | С | |
| 1.1.6. Ergonomic principles | С | |
| 1.1.7. Operating positions in hazardous environments | NA | |
| 1.1.8. Seating and the provision of seats | NA | |
| 1.2. Control systems | - | |
| 1.2.1. Safety and reliability of control systems | С | |
| 1.2.2. Control devices | С | |
| 1.2.3. Control of starting | С | |
| 1.2.4. Stop control devices | - | |
| 1.2.4.1. Normal stop control devices | С | |
| 1.2.4.2. Operational stop | С | |
| 1.2.4.3. Emergency stop devices | С | |
| 1.2.4.4. Stop controls for assemblies of machinery | С | |
| 1.2.5. Mode Selection | С | |
| 1.2.6. Failure of the power supply | С | |
| 1.3. Protection against mechanical hazards | - | |
| 1.3.1. Stability | С | |
| 1.3.2. Break-up during operation | С | |
| 1.3.3. Falling or ejected objects | С | |
| 1.3.4. Sharp edges and angles and rough surfaces | С | |
| 1.3.5. Combined machinery | NA | |
| 1.3.6. Variations in operating conditions | NA | |
| 1.3.7. Moving parts | С | |
| 1.3.8. Moving parts | NA | |
| 1.3.8.1. Moving transmission parts | NA | |



| Machinery Directive linie 2006/42/EG, Annex I - Essential health and safety requirements relating to the design and construction of machinery | Applicable and adhered C :Conform NC:Not conform NA:Not applicable |
|---|--|
| 1.3.8.2. Moving parts involved in the process | NA |
| 1.3.9. Uncontrolled movements | С |
| 1.4. Required characteristics of guards and protective devices | - |
| 1.4.1. General requirements for guards and protective devices | NA |
| 1.4.2. Special requirements for guards | - |
| 1.4.2.1. Fixed guards | NA |
| 1.4.2.2. Interlocking movable guards | NA |
| 1.4.2.3. Adjustable guards resticting access | NA |
| 1.4.3. Protective devices | NA |
| 1.5. Risks due to other hazards | - |
| 1.5.1. Electricity | С |
| 1.5.2. Unwanted static electricity | С |
| 1.5.3. Energy supply other than electricity | NA |
| 1.5.4. Errors of fitting | С |
| 1.5.5. Extreme temperatures | NA |
| 1.5.6. Fire | С |
| 1.5.7. Explosion | NA |
| 1.5.8. Reduction of noise emission | С |
| 1.5.9. Vibrations | С |
| 1.5.10. Ionising and non-ionising radiation | С |
| 1.5.11. External radiation | С |
| 1.5.12. Laser radiation | NA |
| 1.5.13. Emissions of hazardous materials and substances | NA |
| 1.5.14. Risk of being trapped | NA |
| 1.5.15. Slips, trips and falls | NA |
| 1.5.16. Lightning | С |
| 1.6. Maintenance | - |
| 1.6.1. Maintenance | С |
| 1.6.2. Access to operating positions and servicing points | NA |
| 1.6.3. Isolation of energy sources | С |
| 1.6.4. Operator interventions | С |
| 1.6.5. Cleaning of internal parts | NA |
| 1.7. Information | - |
| 1.7.1. Information and warnings / language | С |
| 1.7.1.1. Information and information devices | C |
| 1.7.1.2. Warning devices | NA NA |
| 1.7.2. Warning of residual risks | C |
| 1.7.3. Marking of machinery | C |
| 1.7.4. Instructions | C |
| 1.7.4.1. General guideline for instructions | C |



| Machinery Directive linie 2006/42/EG, Annex I - Essential health and safety requirements relating to the design and construction of machinery | Applicable and adhered C :Conform NC:Not conform NA:Not applicable |
|---|--|
| 1.7.4.2. Instruction's content | С |
| 1.7.4.3. Sales literature | С |



| Mad | Applicable and adhered C:Conform NC:Not conform NA:Not applicable | |
|-----|--|----|
| 2. | Supplementary essential health and safety requirements for certain categories of machinery | NA |



| | inery Directive linie 2006/42/EG, Annex I - Essential health and safety rements relating to the design and construction of machinery | Applicable and adhered C:Conform NC:Not conform NA:Not applicable |
|--------|--|---|
| 2.1. | Hygiene requirements for machinery intended for use with foodstuffs or with cosmetics or pharmaceutical products | - |
| 2.1.1. | General | NA |
| 2.1.2. | Instructions | NA |
| 2.2. | Hand-held and/or hand-guided machinery | - |
| 2.2.1. | Supplementary requirements for portable hand-held and hand-guided machinery | NA |
| 2.2.2. | Portable fixing and other impact machinery | - |
| 2.3. | Machinery for working wood and material with similar characteristics | NA |
| 3. | Supplementary essential health and safety requirements to offset hazards due to the mobility of machinery | NA |
| 3.1. | General | _ |
| 3.1.1. | Definitions | NA |
| 3.2. | Seatings | _ |
| 3.2.1. | Driving position | NA |
| 3.2.2. | Seating | NA |
| 3.2.3. | Positions for persons other than the driver | NA |
| 3.3. | Controls | NA |
| 3.3.1. | Control devices | NA |
| 3.3.2. | Travel movements | NA |
| 3.3.3. | Slowing down, stopping and immobilisation | NA |
| 3.3.4. | Movement of pedestrian-controlled machinery | NA |
| 3.3.5. | Failure in the power supply to steering | NA |
| 3.4. | Protective measures against mechanical hazards | - |
| 3.4.1. | Uncontrolled movements | NA |
| 3.4.2. | Access to the engine compartment | NA |
| 3.4.3. | Roll-over and tip-over | NA |
| 3.4.4. | Falling objects | NA |
| 3.4.5. | Steps and handholds for access | NA |
| 3.4.6. | Towing devices | NA |
| 3.4.7. | Removable mechanical transmission devices | NA |
| 3.5. | Other hazards | = |
| 3.5.1. | Batteries | NA |
| 3.5.2. | Fire extinguishers and extinguisher systems | NA |
| 3.5.3. | Protection of sprayer operators against risks due to exposure to hazardous substances | NA |
| 3.6. | Information and allegation | _ |
| 3.6.1. | Signs, signals and warnings | NA |
| 3.6.2. | Marking of mobile machinery | NA |
| 3.6.3. | Instructions | - |
| 3.6. | 3.1. Declaration of vibrations transmitted by mobile machinery | NA |
| 3.6 | 3.2. Instructions for multiple uses | NA |



| Machinery Directive linie 2006/42/EG, Annex I - Essential health and safety requirements relating to the design and construction of machinery | Applicable and adhered C :Conform NC:Not conform NA:Not applicable | |
|---|--|--|
| 4. Supplementary essential health and safety requirements to offset hazards due to lifting operations | NA | |
| 4.1. Scope of application | _ | |
| 4.1.1. Definitions | NA | |
| 4.1.2. Protection against mechanical hazards | _ | |
| 4.1.2.1. Risks due to lack of stability | NA | |
| 4.1.2.2. Rail tracks and guide rails | NA | |
| 4.1.2.3. Mechanical strength | NA | |
| 4.1.2.4. Pulleys, drums, wheels, ropes and chains | NA | |
| 4.1.2.5. Lifting accessories and their components | NA | |
| 4.1.2.6. Control of movements | NA | |
| 4.1.2.7. Prevention of risks of collisions | NA | |
| 4.1.2.8. Machinery serving fixed landings | <u> </u> | |
| 4.1.2.8.1. Movements of the carrier | NA | |
| 4.1.2.8.2. Access to the carrier | NA | |
| 4.1.2.8.3. Contact with the moving carrier | NA | |
| 4.1.2.8.4. Loads falling off the carrier | NA | |
| 4.1.2.8.5. Safety at landings | NA | |
| 4.1.3. Checking fitness for purpose | NA | |
| 4.2. Requirements to machinery not driven by human power | | |
| 4.2.1. Control of movements of the machinery and the load | NA | |
| 4.2.2. Preventing overloading and overturning | NA | |
| 4.2.3. Guide ropes | NA | |
| 4.3. Informations and marking | - | |
| 4.3.1. Information and marking of chains, ropes and webbing | NA | |
| 4.3.2. Marking of lifting accessories | NA | |
| 4.3.3. Marking of lifting machinery | NA | |
| 4.4. Instructions | - | |
| 4.4.1. Instructions for lifting accessories | NA | |
| 4.4.2. Instructions for lifting machinery | NA | |



| | inery Directive linie 2006/42/EG, Annex I - Essential health and safety rements relating to the design and construction of machinery | Applicable and adhered C:Conform NC:Not conform NA:Not applicable |
|--------------|--|---|
| 5. | Supplementary essential health and safety requirements for machinery intended for underground work | NA |
| 6. preser | Supplementary essential health and safety requirements for machinery ating particular hazards due to the lifting of persons | NA |
| 6.1. | Scope of part 6 | - |
| 6.1.1. | Mechanical strength | NA |
| 6.1.2. | Loading control | NA |
| 6.2. | Control devices | NA |
| 6.3. | Risks for persons in or on the load | - |
| 6.3.1. | Movement of the carrier | NA |
| 6.3.2. | Tilt of the carrier | NA |
| 6.3.3. | Protective roof | NA |
| 6.4. | Machinery for lifting persons serving fixed landings | - |
| 6.4.1. | Risks to persons in or on the carrier | NA |
| 6.4.2. | Controls at landings | NA |
| 6.4.3. | Access to the carrier | NA |
| 6.5. | Markings in the carrier | NA |



Annex to manipulator type

The model numbers of the T series manipulator are shown below.

The robots are divided into several type depend on the arm length, the size of mechanical components used on each axis and the purpose (for the use in clean room).

| | <u>T</u> <u>3</u> | - | <u>40 1</u> | <u>s</u> |
|---|-------------------|----|-------------|----------|
| | a b | | c d | е |
| а | : Series name | Т | | |
| b | : Payload | 3 | : 3kg | |
| | | 6 | : 6kg | |
| С | : Arm length | 40 | : 400mm | 1 |
| | | 60 | : 600mm | 1 |
| d | : Axis#3 stroke | 1 | : 150mm | 1 |
| | | 2 | : 200mm | 1 |
| е | : Environment | S | : Standa | rd |
| | | | | |

The model numbers of the VT series manipulator are shown below.

The robots are divided into several type depend on the arm length, the size of mechanical components used on each axis and the purpose (for the use in clean room).

<u>VT 6 - A 90 1 S</u>

| | a b | | c d e |
|---|---------------|----|---------------------------|
| а | : Series name | VT | |
| b | : Payload | 6 | : 6kg |
| С | : Arm length | 90 | : 900mm |
| d | : Brake | 1 | : All joints with a brake |
| е | : Environment | S | : Standard |