



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS E 3013 : 2001

**Glossary of terms of railway
signalling**

ICS 01.040.45; 45.020; 45.080

Descriptors : railway signals, rail safety, vocabulary

Reference number : JIS E 3013 : 2001 (E)

PROTECTED BY COPYRIGHT

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Land, Infrastructure and Transport through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS E 3013 : 1989** is replaced with **JIS E 3013 : 2001**.

Date of Establishment: 1973-08-01

Date of Revision: 2001-06-27

Date of Public Notice in Official Gazette: 2001-07-05

Investigated by: Japanese Industrial Standards Committee
Divisional Council on Railways and Rolling
Stock

JIS E 3013 : 2001, First English edition published in 2003-06

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

Glossary of terms of railway signalling

1 Scope This Japanese Industrial Standard establishes a glossary of terms used for railway signalling (hereafter referred to as “terms”).

2 Classification Terms are classified as follows.

- a) General terms
- b) Terms on signal apparatus
- c) Terms on block instrument
- d) Terms on switch-and-lock movement apparatus
- e) Terms on interlocking device
- f) Terms on level crossing protection
- g) Terms on track circuit equipment
- h) Terms on other equipment

3 The terms and definitions Terms and their definitions shall be as given in the following.

The English equivalent is shown for informative reference.

a) General terms

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
1001	鉄道信号保安装置	TETUDÔ SINGÔ HOAN SÔTI	Means to maintain the safety of train operation or movement of rolling stock car, which comprise, as a generic term, signal apparatus, block instrument, switch-and-lock movement apparatus, interlocking device, level crossing protection, track circuit equipment and so forth.	railway signalling equipment
1002	列車	RESSYA	Vehicles arranged for operation purpose on the permanent way out of the station.	train
1003	車両	SYARYÔ	A generic term of locomotive, passenger-carrying car, freight-train car and special kind car.	rolling stock car, vehicle
1004	安全測線	ANZEN SOKUSEN	A track installed, in the station, with a view of preventing a train or vehicle from collision or contact failure on the occasion of running past accidentally beyond the fixed stopping position.	safety siding, safety track
1005	過走余裕距離	KASÔ YOYÛ KYORI	The distance between a signal or train stop indicator and the position of limit being in no danger of collision, contact or derailment owing to the train or vehicle over-running.	safety allowance for over- running
1006	確認距離	KAKUNIN KYORI	The distance between the position allowing the signal aspects to be continuously confirmed and that signal.	sighting distance
1007	車両接触限界	SYARYÔ SESSYOKU GENKAI	The limit, in an area of junction or crossing of tracks, in which a vehicle on each track will not interfere the other track.	clearance limit
1008	定位・反位	TEI • HAN'I	It is general to refer to the regular state of apparatus as "normal position", and the other (opposite) states as "reverse position". For switch-and-lock movements, the direction allowing to regularly be in clear is referred to as the "normal direction", and the other directions are as the "reverse position".	normal position • reverse position
1009	連動図表	RENDÔ ZUHYÔ	Drawing which represents such a technical content of interlocking device as the interlocking mechanism by using lettered and graphical symbols for railway signalling.	interlocking table

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
1010	信号結線図 信号結線図	SINGÔ KESSENZU	Diagram indicating an electric circuit of railway signalling equipment by using lettered and graphical symbols for railway signalling.	circuit diagram
1011	進路信号方式	SINRO SINGÔ HÔSIKI	Signal system to indicate the route clear state to a train.	route signal system
1012	速度信号方式	SOKUDO SINGÔ HÔSIKI	Signal system to indicate driving speed to the train.	speed signal system
1013	対向・背向	TAIKÔ • HAIKÔ	For a turnout, the direction from the front to the rear end of the device is referred to as the "facing", and the opposite direction, as the "trailing". For train operating direction, it is referred to as "facing" that some other train faces in the opposite direction to a train proceeding.	facing • trailing
1014	信号用リレー	SINGÔYÔ RIRÊ	Relays used in railway signalling equipment, which comprise, as a generic term, track relay, normal relay and so forth.	signal relay
1015	フェールセーフ	FÊRU SÊHU	Property of an apparatus to be into the safety side, even where it fails, and not operating toward the danger side. On the occasion of apparatus failure in railway signal, the aspect shall be in the limiting (train stopping or speed reduction) side.	fail safe, fail-safe

b) Terms on signal apparatus

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2001	鉄道信号	TETUDÔ SINGÔ	Means for communicating the wills, in the railway system, by using a certain symbol or code of colour, figure, sound and the like, which comprise signal, sign and indicator.	railway signal
2002	信号	SINGÔ	Showing aspect of conditions for traffic in a certain section to trains or vehicles by means of colour, figure, sound and the like.	signal

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2003	現示	GENZI	Representation of the signal indicating content.	aspect
2004	表示	HYÔZI	Representation of the condition or state by means of sign, indicator and the like.	indication
2005	信号装置	SINGÔ SÔTI	A generic term for the devices making the aspect or indication of railway signalling.	signal apparatus
2006	信号機	SINGÔKI	Devices for making signal aspects, which comprise fixed signals, cab signals and temporary signals.	signal
2007	信号機の外方	SINGÔKI NO GAIHÔ	The direction of signalling aspect of the signal.	in approach of signal
2008	信号機の内方	SINGÔKI NO NAIHÔ	The direction, in the side of no signalling aspect of the signal, in which train or vehicle is protected.	in rear of signal
2009	常置信号機	ZYÔTI SINGÔKI	Signals installed stationary at a certain place, which comprise main signals, subsidiary signals and signal appendants.	fixed signal
2010	主信号機	SYU-SINGÔKI	Signals having a certain protective area, which comprise home signal, starting signal, block signal, call-on signal and shunting signal.	main signal
2011	場内信号機	ZYÔNAI SINGÔKI	Signals for a train intending to enter the station.	home signal
2012	出発信号機	SYUPPATU SINGÔKI	Signals for a train intending to start from the station.	starting signal
2013	閉そく信号機	HEISOKU SINGÔKI	Signals for a train intending to enter the block section.	block signal
2014	誘導信号機	YÛDÔ SINGÔKI	Signals for a train or vehicle intending to enter under a guidance while the home signal or shunting signal is being prohibited from the aspect to indicate proceeding.	call-on signal, calling-on signal
2015	入換信号機	IREKAE SINGÔKI	Signals for the vehicle to be shunted.	shunting signal
2016	従属信号機	ZYÛZOKU SINGÔKI	Signals being subsidiary to the main signal, which comprise distance signal, passing signal and repeating signal.	subsidiary signal

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2017	遠方信号機	ENPÔ SINGÔKI	The signal, subsidiary to a home signal, giving notice of signalling aspect of the principal signal at a position in approach thereof.	distant signal
2018	通過信号機	TÔKA SINGÔKI	The signal, subsidiary to a starting signal, giving notice of signalling aspect of the principal signal, at a position in approach thereof, to inform the passing permission or not.	passing signal
2019	中継信号機	TYÛKEI SINGÔKI	The signal, subsidiary to a home signal, starting signal or block signal, to relay the signalling aspect of the principal signal at a position in approach thereof.	repeating signal
2020	信号附属機	SINGÔ HUZOKUKI	A generic term for route indicator and preliminary route indicator, to be attached to the main signal or subsidiary signal, which are provided for supplementing the conditions that the relevant signal should indicate.	signal appendant
2021	進路表示機	SINRO HYÔZIKI	Device to be attached to the home signal, starting signal, call-on signal or shunting signal, where it is used commonly for two or more routes, to indicate the route of the train or vehicle.	route indicator
2022	進路予告機	SINRO YOKOKUKI	Device, being attached to the home signal, starting signal, block signal, distance signal or repeating signal, to previously inform the train route that will be indicated by the following home signal or starting signal.	preliminary route indicator
2023	臨時信号機	RINZI SINGÔKI	Signals equipped temporarily, in the case where trains or vehicles are being incapable of normal traffic owing to a railway failure or other occasion, which comprise slow speed signal, slow speed approach signal and slow speed release signal.	temporary signal
2024	徐行信号機	ZYOKÔ SINGÔKI	A signal to indicate slow speed toward a train or vehicle intending to enter the area in which slow speed operation is required.	slow speed signal
2025	徐行予告信号機	ZYOKÔ YOKOKU SINGÔKI	A signal giving notice of slow speed operation at a place in approach of the slow speed signal.	slow speed approach signal, slow speed warning signal

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2026	徐行解除信号機	ZYOKÔ KAIZYO SINGÔKI	A signal to indicate releasing slow speed for a train or vehicle intending to depart from the area where slow speed operation is required.	released speed signal, slow speed release signal
2027	二位式信号機	NIISIKI SINGÔKI	A signal making the aspect of signal indicating the route condition for only one blocking section in rear of the signal.	two-position signalling system
2028	三位式信号機	SAN'ISIKI SINGÔKI	A signal capable of making the aspect of signal indicating the route condition for two or more blocking sections in rear of the signal.	three-position signalling system
2029	色灯式信号機	SIKITÔSIKI SINGÔKI	Signals making aspect of the signal by means of colour lights.	colour light signal
2030	灯列式信号機	TÔRETUSIKI SINGÔKI	Signals making aspect of the signal by means of lights arrangement and their lighting position.	position light signal
2031	腕木式信号機	UDEGISIKI SINGÔKI	Signals making aspect of the signal by means of bar position.	semaphore signal
2032	多灯形信号機	TATÔGATA SINGÔKI	Colour light signals using light sources individually by every colour of the lights.	multiple light signal
2033	单灯形信号機	TANTÔGATA SINGÔKI	Colour light signals using a single light source.	searchlight signal
2034	車内信号機	SYANAI SINGÔKI	A signal making aspect of the signal, in the inside of vehicle, to indicate the permissible train speed, which consists of wayside apparatus and on-board apparatus.	cab signal
2035	信号表示区間	SINGÔ HYÔZI KUKAN	An individual section, in the cab signal block system, in which the identical signal information is transmitted to the trains.	cab signal section
2036	主体の信号機	SYUTAI NO SINGÔKI	The signal being principal for the subsidiary signal or signal appendant.	principal signal
2037	自動の信号機	ZIDÔ NO SINGÔKI	A signal controlled automatically by means of track circuit and the like.	automatic signal
2038	手動の信号機	SYUDÔ NO SINGÔKI	A signal controlled by operator's hand.	manual signal

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2039	半自動の信号機	HAN-ZIDÔ NO SINGÔKI	A signal controlled with track circuit and the like, and also controlled by the operator's hand.	semi-automatic signal
2040	保留の信号機	HORYÛ NO SINGÔKI	The signal which, after a semi-automatic signal once has been in stopping signal aspect, continuously makes the aspect of stopping signal until the signal lever is applied.	stick signal
2041	許容停止の信号機	KYOYÔ TEISI NO SINGÔKI	The signal which, even in the aspect of stopping signal, allows trains proceeding over it, under the prescribed conditions.	permissive signal
2042	絶対停止の信号機	ZETTAI TEISI NO SINGÔKI	The signal prohibiting trains absolutely from entrance over it during the stopping signal aspect.	absolute signal
2043	進行定位の信号機	SINKÔ TEIH NO SINGÔKI	The signal making the aspect generally being in proceed signal.	normal proceed signal
2044	停止定位の信号機	TEISI TEIH NO SINGÔKI	The signal making the aspect generally being in stopping signal.	normal stop signal
2045	手信号	TESINGÔ	Signals expressed with the light or flag.	hand signal, flag signal
2046	手信号代用器	TESINGÔ DAIYÔKI	Apparatus used in place of the hand signal.	substitute apparatus for hand signal
2047	特殊信号	TOKUSYU SINGÔ	Signals to be used in an emergency, which comprise fusee, flash, detonating and audible signals.	accident warning signal
2048	発炎信号	HATUEN SINGÔ	The stopping signal by means of flames.	fusee signal
2049	発光信号	HAKKÔ SINGÔ	The stopping signal by means of blinking red light.	accident warning flash signal
2050	特殊信号発光機	TOKUSYU SINGÔ HAKKÔKI	A device for making aspect of flash signal on the occasion which urgently requires stopping a train.	obstruction warning indicator
2051	発雷信号	HATURAI SINGÔ	The stopping signal by means of detonation bang.	detonating signal
2052	発報信号	HAPPÔ SINGÔ	The stopping signal by means of audible alarm.	accident warning audible signal

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2053	信号雷管	SINGÔ RAIKAN	A detonator to be used for the detonation signal.	detonator
2054	信号炎管	SINGÔ ENKAN	A fusee to be used for the fusee signal.	fusee
2055	合図	AIZU	Means for communication between the people in charge, where the signaler's will is communicated to the other party by means of figure, colour, sound and the like.	sign
2056	合図器	AIZUKI	A generic term of the devices to be used for signing.	sign
2057	出発合図器	SYUPPATU AIZUKI	Device for making departure sign.	departure sign
2058	ブレーキ試験合図器	BURÊKI SIKEN AIZUKI	Device for making brake test sign.	brake test sign device
2059	移動禁止合図器	IDÔKINSI AIZUKI	Device for making forbidden movement sign.	forbidden movement sign
2060	入換合図器	IREKAE AIZUKI	Device for making shunting sign.	shunting sign
2061	標識	HYÔSIKI	A generic term for the devices to indicate the position, direction, conditions and the like subjected, by such means as figure and colour.	indicator, marker
2062	閉そく信号標識	HEISOKU SINGÔ HYÔSIKI	An indicator expressing the fact that it is an automatic signal and also a block signal. This is also termed as "identification lamp".	marker light
2063	場内標識	ZYÔNAI HYÔSIKI	The indicator, in a cab signal block system, for beginning of the track to allow a train entering the station.	home signal position indicator
2064	出発標識	SYUPPATU HYÔSIKI	The indicator, in a cab signal block system, for beginning of the track to allow a train leaving from the station.	leaving-signal position indicator
2065	中継信号標識	TYÛKEI SINGÔ HYÔSIKI	The indicator to represent being colour light repeating signal.	repeating signal marker
2066	出発反応標識	SYUPPATU HANNÔ HYÔSIKI	The indicator to inform the aspect of starting signal.	repeater of starting signal

No.	Term (Japanese character)	Reading	Definition	English equivalent (informative)
2067	列車停止標識	RESSYA TEISI HYÔSIKI	The indicator to indicate the positional limit of stopping trains, for the case where incapable of setting a starting signal at the specified position, or for the track provided with no starting signal.	train stop indicator
2068	車両停止標識	SYARYÔ TEISI HYÔSIKI	The indicator to indicate the positional limit of stopping vehicles, for the track in which the vehicles are to be shunted, and where it is provided with no shunting signal or indicator.	car stop indicator
2069	入換標識	IREKAE HYÔSIKI	The indicator informing the clear state of the track in which the vehicles are to be shunted.	shunting indicator
2070	転てつ器標識	TENTETUKI HYÔSIKI	The indicator for informing whether the point is in normal or reverse position, which comprises regular point indicator, derailing point indicator, light (run-over) type point indicator and spring point indicator.	point indicator, switch indicator (USA)
2071	架線終端標識	KASEN SYÛTAN HYÔSIKI	An indicator used for the end terminal of an overhead contact wire when it is to be indicated.	contact wire terminal indicator
2072	車止標識	KURUMADOME HYÔSIKI	An indicator used for the position of car stop when it is to be indicated.	car stop marker
2073	開通表示灯	KAITÛ HYÔZITÔ	The light indicating absence of train or vehicle in a certain section of the route.	opening route indicator, route clear light
2074	線路表示器	SENRO HYÔZIKI	The device attached to a kick off shunting indicator to indicate which track is subjected to the shunting indicator.	track number indicator
2075	線路別表示灯	SENROBETU HYÔZITÔ	The lights, belonging to a shunting indicator installed at a junction of multiple tracks into a single track, where it is commonly applied to them, provided for every track to indicate any of the collected tracks being clear.	track marker
2076	信号てこ	SINGÔ TEKO	A lever to control the signal.	signal lever
2077	信号反応器	SINGÔ HANNÔKI	Device to inform the state of signalling aspect of the signal.	signal repeater
2078	接近表示器	SEKKIN HYÔZIKI	Device to indicate a train having approached the station.	approach indicator