... MassMutual Ascend

American Landmark 5

OVERVIEW

ISSUE AGES

0-89 (qualified); 0-89 (non-qualified); 0-75 (inherited IRA); 0-75 (inherited non-qualified)

Issue age is the owner's age at last birthday. For joint owners, the oldest age will be used as the issue age. If the owner is a non-natural person, the age of the eldest annuitant will be treated as the age of the owner for all purposes under this contract.

In Texas, contracts can only be issued up to age 86.

PURCHASE PAYMENTS

This product accepts a single purchase payment for non-qualified, traditional 403(b), Roth 403(b), traditional IRA, Roth IRA, SEP IRA, SIMPLE IRA, Inherited IRA, Inherited and 457 plan funds. Additional purchase payments allowed during the first year of the contract only. Terms begin only on the $6^{\rm th}$ and $20^{\rm th}$ of each month. Purchase payments received prior to the beginning of a term will be held in the purchase payment account until the beginning of the next term. Additional purchase payments have their own interest crediting terms.

Minimum: Initial purchase payment: \$10,000; additional purchase payments: \$2.000

Maximum: \$1 million for ages 0-85; \$500,000 for ages 86+ without prior Home Office approval

Maximums apply to the total purchase payments made to all annuities from MassMutual Ascend with the same owners or the same annuitants.

EXTENDED CARE WAIVER RIDER

To help ease the strain of certain unforeseen events, an extended care waiver is available for no additional charge. If the owner is confined to a nursing home or other long-term care facility after the completion of the first contract year for at least 90 consecutive days, early withdrawal charges and MVAs may be waived on withdrawals up to a full surrender.

Not available in Massachusetts. In California, the Extended Care Waiver Rider has been replaced with the Waiver of Early Withdrawal Charges for Facility Care or Home Care or Community-Based Services Rider, which provides for a waiver of early withdrawal charges under an expanded variety of circumstances.

TERMINAL ILLNESS WAIVER RIDER

Provided that the diagnosis is rendered more than one year after the contract effective date, up to 100% of the account value can be withdrawn without deduction of an early withdrawal charge or MVA if the owner or joint owner is diagnosed by a physician as having a terminal illness with a prognosis of 12 months or less.

This waiver may be used only once. Not available in Massachusetts.

INTEREST STRATEGIES

Upon issue, the owner selects from two types of interest strategies: a **declared rate strategy** and **indexed strategies**. At the end of each term, the owner has the opportunity to transfer funds among the available interest strategies. To transfer funds, the owner must submit changes at least one day before the new term begins. Unless the owner transfers funds at the end of a term, funds are automatically applied to the same strategy for the next term. Funds held in the five-year strategy are automatically applied to the S&P 500® 1-year strategy, unless the owner elects otherwise. Available strategies are subject to change at any time for new sales.

TERM

- The five-year cap lock strategy has a five-year term. The cap is locked in for the entire five-year term. This strategy may only be selected during the first contract year.
- All other strategies have a one-year term.
- With all indexed strategies, interest is credited annually on the last day of each term year.
- Clients may change their strategy allocations at the end of each one or five-year term.

INTEREST RATES

Purchase payment account interest rate: Interest is credited daily on amounts held in this account based on an applicable interest rate. This interest rate is guaranteed to be at least equal to the guaranteed minimum interest rate set out in the contract.

Declared interest rate: Interest is credited daily on amounts held under a declared rate strategy based on the applicable declared interest rate. The current declared interest rate will not change during the strategy's term and is guaranteed to never be below the guaranteed minimum interest rate set out in the contract.

Indexed interest rate: An indexed interest rate is determined, in part, by the performance of the S&P 500®, S&P 500 Risk Control 10% Index (SPXAV10P), S&P U.S. Retiree Spending Index (SPRETIRE) or the iShares U.S. Real Estate ETF (IYR). Indexed interest is credited annually on the last day of each term year. Indexed strategies include:

- S&P 500® 1-year point-to-point with cap
- S&P 500[®] 5-year cap lock annual point-to-point
- S&P 500 Risk Control 1-year point-to-point with participation rate
- S&P U.S. Retiree Spending 1-year point-to-point with participation rate
- iShares U.S. Real Estate 1-year point-to-point with cap

Point-to-point indexed strategy: The indexed interest rate for a term year is determined by comparing the index value on the last day of that term year to the value on the first day of that term year. The indexed interest rate for that term year equals the index change, up to the cap or multiplied by the participation rate. The indexed interest rate will never be less than 0%.

Strategies may not be available in all states.

ACCOUNT VALUE

The account value equals the sum of the following values:

Purchase payment account value: The purchase payment account value equals the purchase payments received, less amounts applied to an interest strategy, less withdrawals and applicable early withdrawal charges, plus or minus applicable MVAs, plus interest credited, and less any applicable premium tax or other applicable tax.

Declared rate strategy value: A declared rate strategy value equals the amount applied to the declared rate strategy, less withdrawals and applicable early withdrawal charges, plus or minus applicable MVAs and plus interest credited at the declared interest rate.

Interest strategy value: An interest strategy value equals the amount applied to that strategy, less withdrawals and applicable early withdrawal charges, plus or minus applicable MVAs, and plus indexed interest credited.

SURRENDER VALUE

The surrender value equals the greater of the account value adjusted for any MVA and less any early withdrawal changes or the guaranteed minimum surrender value.

GUARANTEED MINIMUM SURRENDER VALUE (GMSV)

The GMSV equals 87.5% of purchase payments, plus interest credited daily at a minimum guaranteed rate, less withdrawals, not including amounts applied to pay early withdrawal charges or negative MVAs. The GMSV will not be less than the minimum values required by each state.

EARLY WITHDRAWAL

CHARGES

FEES

There are no up-front sales charges or fees.

EARLY WITHDRAWAL CHARGE

An early withdrawal charge is applied to surrenders and withdrawals for the first five contract years.

CONTRACT YEAR

1 2 3 4 5 6+

9%

MARKET VALUE

ADJUSTMENT

(MVA)

During the first five contract years, a market value adjustment (or MVA) will apply if the contract is surrendered or a withdrawal above the free withdrawal allowance is taken.

8%

7%

6%

5%

0%

An MVA is an adjustment to the contract values based on how market interest rates have changed since the contract was purchased. If interest rates have been fairly steady or have gone up, the adjustment will be negative and may decrease contract values. If interest rates have gone down, the adjustment may be positive and may increase contract values. The amount subject to the adjustment is the portion of the account value withdrawn after the 10% free withdrawal allowance. This amount is then multiplied by the MVA factor.

A positive MVA will never be more than the early withdrawal charge that would apply to the withdrawal or surrender. A negative MVA, together with the early withdrawal charge, will never reduce the account value by more than an amount equal to two times that charge.

FREE WITHDRAWAL ALLOWANCE

During the first contract year, 10% of the purchase payments may be withdrawn without an early withdrawal charge or MVA. After the first contract year, 10% of the account value on the most recent contract anniversary may be withdrawn without an early withdrawal charge or MVA. The sum of all previous withdrawals during the same contract year will be subtracted to determine the amount available. This free withdrawal allowance is not cumulative, and unused amounts do not carry over to the next contract year.

WITHDRAWALS	Withdrawals are allowed any time prior to the annuity payout initiation date. All withdrawals are subject to IRS regulations, early withdrawal charges and MVAs. Withdrawals will be taken first from amounts applied to the purchase payment account, then from the declared rate strategy, then from the other interest strategy(ies) with the shortest term. If there are multiple interest strategies that meet that criterion, withdrawals will be taken proportionally from all interest strategies with the shortest term. Amounts withdrawn from an indexed strategy prior to the end of a term year will not be credited with interest.
	Minimum withdrawal: \$500; Minimum account value following withdrawal: \$5,000
EASY SYSTEMATIC PAYMENT (ESP) PROGRAM (NON-CONTRACTUAL)	The fixed dollar and RMD options are available. Refer to the Terms and Conditions section of the applicable ESP program election agreement form for eligibility requirements. ESP payments reduce the amount available under the free withdrawal allowance. Indexed interest is credited only at the end of a term year. Amounts withdrawn under the ESP program before the end of a term year will not earn any indexed interest.
PAYOUT OPTIONS	The following options are available following the first contract year: fixed period payout, life payout or life payout with payments for at least a fixed period, and joint and one-half survivor payout.
DEATH BENEFIT	The death benefit amount is based on the greater of the account value or the GMSV. A death benefit is payable if the owner dies before annuitization or surrender. A spouse who is the surviving joint owner or sole surviving beneficiary may become the successor owner.
STATE VARIATIONS	Refer to State Approval Chart for non-MVA states.
	New Jersey: The GMSV equals 90% of purchase payments, plus interest credited daily at a minimum guaranteed rate, less withdrawals, not including amounts applied to pay early withdrawal charges or negative MVAs.
	Texas: Contracts can only be issued up to age 86.

The S&P 500 Risk Control 10% Index refers to the S&P 500 Average Daily Risk Control 10% Price Return Index. For more information, visit US.SPIndices.com and search keyword SPXAV10P. For more information on the S&P U.S. Retiree Spending Index, visit US.SPindices.com and search keyword SPRETIRE. For more information on the iShares U.S. Real Estate ETF, visit iShares.com and search ticker symbol IYR.

The S&P 500 Index, S&P U.S. Retiree Spending Index and S&P 500 Average Daily Risk Control 10% Price Return Index are products of S&P Dow Jones Indices LLC ("SPDJI"), and have been licensed for use by MassMutual Ascend Life Insurance Company. Standard & Poor's®, S&P®, S&P 500® and S&P 500 Average Daily Risk Control 10%™ are trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by MassMutual Ascend. MassMutual Ascend's American Landmark 5 is not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, and none of such parties makes any representation regarding the advisability of investing in such product nor do they have any liability for any errors, omissions, or interruption of the S&P 500 Index, S&P U.S. Retiree Spending Index or the S&P 500 Average Daily Risk Control 10% Price Return Index.

The iShares U.S. Real Estate ETF is distributed by BlackRock Investments, LLC. iShares®, BLACKROCK®, and the corresponding logos are registered and unregistered trademarks of BlackRock, Inc. and its affiliates ("BlackRock"), and these trademarks have been licensed for certain purposes by MassMutual Ascend Life Insurance Company. MassMutual Ascend annuity products are not sponsored, endorsed, sold or promoted by BlackRock, and purchasers of an annuity from MassMutual Ascend do not acquire any interest in the iShares U.S. Real Estate ETF nor enter into any relationship of any kind with BlackRock. BlackRock makes no representation or warranty, express or implied, to the owners of any MassMutual Ascend annuity product or any member of the public regarding the advisability of purchasing an annuity, nor does it have any liability for any errors, omissions, interruptions or use of the iShares U.S. Real Estate ETF or any data related thereto.

Product issued by MassMutual Ascend Life Insurance Company (Cincinnati, Ohio), a wholly owned subsidiary of Massachusetts Mutual Life Insurance Company (MassMutual), under contract form P1112916NW and rider forms R6032310NW and R6032410NW (not available in Massachusetts). Form numbers, features and availability may vary by state.

The product overview is intended only to provide a summary of this annuity product. In order to obtain a complete understanding, please read the contract provisions carefully as this is not intended to be a substitute for the contract.

For producer use only. Not for use in sales solicitation.

NOT A BANK OR CREDIT UNION DEPOSIT OR OBLIGATION • NOT FDIC OR NCUA-INSURED • NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • NOT GUARANTEED BY ANY BANK OR CREDIT UNION

... MassMutual Ascend

© 2022 MassMutual Ascend Life Insurance Company, Cincinnati, OH 45202. All rights reserved. MassMutualAscend.com B1122917NW